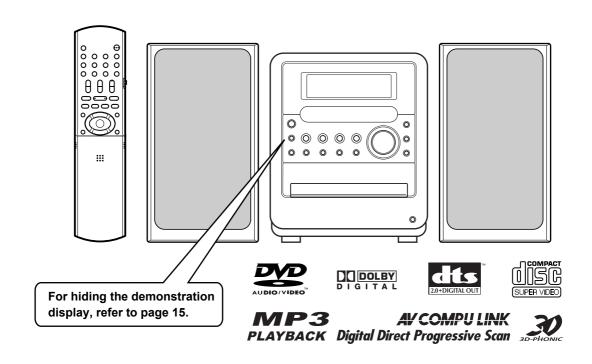
JVC



## MICRO COMPONENT SYSTEM

# **UX-QD9S**

Consists of CA-UXQD9S and SP-UXQD9S



INSTRUCTIONS

## Warnings, Cautions and Others

#### **CAUTION**

To reduce the risk of electrical shocks, fire, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

#### CAUTION — O/I button!

Disconnect the mains plug to shut the power off completely. The O/I button in any position does not disconnect the mains line. The power can be remote controlled.

#### **CAUTION**

- Do not block the ventilation openings or holes.
   (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

#### IMPORTANT FOR LASER PRODUCTS

- 1. CLASS 1 LASER PRODUCT
- CAUTION: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
- CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED INSIDE THE UNIT.

<b>CAUTION</b> : Visible and invisible	ADVARSEL: Synlig og usynlig	VARNING: Synlig och	<b>VARO</b> : Avattaessa ja suojalukitus
	laserstråling når maskinen er		
	åben eller interlocken fejler.		
	Undgå direkte eksponering til		
BEAM. (e)	stråling. (d)	strålen. (s)	kohdistumista suoraan itseesi. (f)

#### **CAUTION** — Proper Ventilation

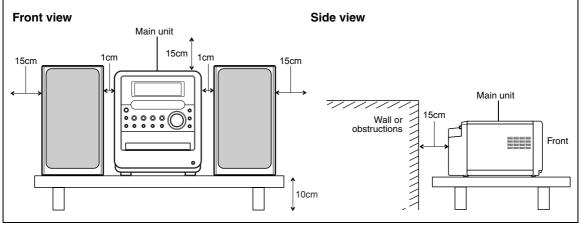
To avoid risk of electric shock and fire and to protect from damage, locate the apparatus as follows:

Top/Front/Back/Sides: No obstructions should be placed in the areas shown by the dimensions below.

Bottom: Place on the level surface. Maintain adequate air path for ventilation by placing on

a stand with a height of 10 cm more.

In addition, maintain the best possible air circulation.



## **Table of Contents**

Used frequently marks refer to operation used frequently. You can quickly learn the general usage of this product by reading those parts only.

Introduction	Listening to Radio Broadcasts
Notes on Operation 3	Listening to Radio Broadcasts
Suitable Locations for the Main Unit	Used frequently 19
Condensation3	Setting the AM Tuner Spacing19
Cleaning the Main Unit	Selecting a Radio Station20
Listener's Etiquette	Storing Radio Stations (Preset)20
Playable Disc Types	Tuning In to a Preset Radio Station20
Disc Structure	
	Listening to Discs
Special Cautions 7	
Notes on Handling	Basic Operations of the DVD Player 21
Supplied Accessories	Playback
Preparation	Playing Back from a Position 10 Seconds
rieparation	Before (One Touch Replay)23
Part Description8	Stopping PlaybackUsed frequently 24
Remote Control 9	Resuming Playback (RESUME)24
Inserting Batteries into the Remote	Pausing Playback24
Control9	Advancing Picture Frame by Frame24
Operating the TV Using the Remote	Fast Reverse/Fast Forward
Control10	Search
Connections11	Slow Motion Playback25
Connecting the Antennas11	Skipping to the Beginning of
Connecting the Speakers13	a TrackUsed frequently 25
Connecting Other Equipment14	Skipping to the Beginning of a Track with
Connecting with a TV14	the Number Buttons
When a Clearer Picture Is Desired15	Selecting a Track from the Menu Screen25
Connecting the Power Plug15	Convenient Functions of the DVD
	Player26
Basic Operations	Selecting the AudioUsed frequently 26
	Selecting the Subtitle27
Basic Operations16	Selecting a View Angle27
Setting the Clock16	Magnifying the Picture (ZOOM)27
Turning On/Off the Main Unit. Used frequently 17	Adjusting the Picture Quality (VFP)28
Adjusting the Volume Used frequently 17	Creating Realistic Sound (3D PHONIC)28
Temporarily Turning Off the Sound	Adjusting Playback Level (DVD LEVEL)29 Enjoying Better Pictures
(FADE MUTING)17	(PROGRESSIVE)29
Emphasizing Heavy Bass Sound	Playing Back the Bonus Group30
(AHB PRO)17 Adjusting the Sound Quality17	Browsable Still Pictures (B.S.P.)30
Changing the Color Patterns for	Playing Back the Disc in the Desired Order
the Display Window and Disc Tray18	(Program Playback)31
the display willdow and disc may To	Random Playback32
	Repeat Playback33
	Status Bar and Menu Bar34
	Using the Status Bar and Menu Bar34
	Playing Back the Designated Part
	Repeatedly (A-B Repeat Playback)35
	Designate the Time (Time Search)35

Playing Back MP3/WMA and JPEG
Discs36
Playback36
Repeat Playback37
Preferences
Basic Operations
PICTURE
AUDIO39
OTHERS39
Country/Area Codes40
Language Codes41
Listening to Cassette Tapes
Listening to Cassette Tapes
Osed requertity
Listening to Other Equipment
Listening to Other Equipment43
Adjusting the Sound Input Level from
Other Equipment43
-
Pacardina Sound
Recording Sound
Recording Sound to Cassette Tapes
Recording Sound to Cassette TapesUsed frequently 44
Recording Sound to Cassette Tapes  Used frequently 44  Quitting Recording
Recording Sound to Cassette Tapes
Recording Sound to Cassette Tapes  Used frequently 44  Quitting Recording
Recording Sound to Cassette Tapes
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44  Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording 45 Recording Only One Track from a Disc 45 Recording the Second or Subsequent Track to the Last Track from a Disc 45 Program Recording from a Disc 45 Recording with No Blank Time between Tracks 45 Erasing Recorded Sound from a Cassette Tape 45  Convenient Functions  Using the Timers 46 Recording Timer 47 Playback Timer 48 Auto Standby 50
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording
Recording Sound to Cassette Tapes  Used frequently 44 Quitting Recording 45 Recording Only One Track from a Disc 45 Recording the Second or Subsequent Track to the Last Track from a Disc 45 Program Recording from a Disc 45 Recording with No Blank Time between Tracks 45 Erasing Recorded Sound from a Cassette Tape 45  Convenient Functions  Using the Timers 46 Recording Timer 47 Playback Timer 48 Auto Standby 50

Reference	
Handling Discs/Cassette Tapes	52
Disc Messages	53
Troubleshooting	53
Specifications	54

## **Notes on Operation**

## Suitable Locations for the Main Unit

To minimize the need for servicing and maintain the high quality of this product, do not place the main unit in the following locations:

- In a position subject to high humidity or considerable dust
- · On an uneven or unstable surface
- · Near a heat source
- Near a computer, fluorescent light or other electric appliance
- · In a small room with insufficient ventilation
- In a position exposed to direct sunlight
- In a position exposed to excessive cold
- In a position exposed to strong vibration
- · Near a TV, other amplifier, or tuner
- · Near a magnetic source

#### CAUTION

 The operating temperature of this product is 5°C to 35°C. Use in temperatures outside this range may cause a malfunction or damage the product.

#### Condensation

Under the following conditions, you may not be able to operate this product properly due to condensation formed on the lens of the main unit:

- When you have just started an air conditioner to warm your room
- When you have placed the main unit at an area with high humidity
- When you have moved the main unit from a cold place to a warm place

When condensation forms, leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.

## **Cleaning the Main Unit**

When the operation panel becomes dirty, dust it with a soft dry cloth. When the operation panel is very dirty, wipe it with a cloth dampened with a small amount of a neutral detergent, and then wipe it with a soft dry cloth.

#### CAUTION

 Do not wipe the operation panel with thinners, benzenes or other chemical agents. Do not spray insecticides onto the operation panel. These may cause discoloration and damage to the surface.

### **Listener's Etiquette**

When using headphones, keep the volume at a moderate level so as not to over-stimulate your ears

■When enjoying sound from the speakers, adjust the volume to a suitable level to avoid disturbing your neighbors.

Even low-volume sound carries a long way, especially at night. Show consideration to your neighbors by closing windows or using headphones.

Manufactured under license from Dolby Laboratories. "Dolby", "MLP Lossless", and the double-D symbol are trademarks of Dolby Laboratories.

<sup>• &</sup>quot;DTS" and "DTS 2.0+DIGITAL OUT" are registered trademarks of Digital Theater Systems, Inc.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents
and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright
protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited
viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is
prohibited.

## **Playable Disc Types**

This product has been designed to play back the following discs:

DVD VIDEO, DVD AUDIO, VCD, SVCD, CD This product can also play back the following discs:

- Finalized DVD-R/RW discs recorded in the DVD VIDEO format.
- CD-R/RW discs recorded in the following formats
- Music CDs (finalized discs)
- VCDs
- SVCDs
- MP3/WMA/JPEG discs recorded in ISO 9660 (for details, refer to "About MP3/WMA/JPEG discs") However, some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them. Only sounds can be played back from the following discs:

MIX-MODE CD CD-FXTRA CD-G CD TEXT

#### Discs you can play:

Discs you can play.			
Disc Type	Mark (Logo)	Video Format	Region Code Number*
DVD VIDEO	VIDEO TM VIDEO	PAL/ NTSC	4/ALL
DVD AUDIO	AUDIO/VIDEO AUDIO	1	1
VCD	COMPACT VIdeo CD	PAL/ NTSC	1
SVCD	COMPACT VIDEO VIDEO SUPER VIDEO	PAL/ NTSC	
CD	COMPACT  DIGITAL AUDIO	ı	1
CD-R	COMPACT DIGITAL AUDIO Recordable	1	1
CD-RW	COMPACT DIGITAL AUDIO REWITLABLE	_	_

DVD Logo is a trademark of DVD Format/Logo Licensing Corporation.

\* Note on Region Code

DVD players and DVD VIDEOs have their own region code numbers. This product can only play back a DVD VIDEO recorded with the region code number and video format mentioned above.

#### **Examples:**









If a DVD VIDEO with an improper region code number is loaded, "REGION CODE ERROR!" appears on the TV screen and playback cannot start.

 On some DVD VIDEOs, DVD AUDIOS, VCDs or SVCDs, their actual operation may be different from what is explained in this manual. This is due to the disc programming and disc structure, not a malfunction of this product.

#### About CD-Rs/CD-RWs

You can play back a CD-R/CD-RW only when the disc is finalized.

- You can play back a CD-R/CD-RW which has been recorded in the audio CD format and a CD-R/CD-RW to which audio data (MP3/WMA) or a still picture data (JPEG) file is recorded.
- However, playback is impossible in some cases due to the disc characteristics, recording condition, scratches or dirt on the disc, or dirt or condensation on the lens
- Before using a CD-R/CD-RW, carefully read the cautions regarding the disc.
- This product does not support playback or CD text display of sound files such as MP3s
- To play back a CD-RW on this product, erase all tracks if the CD-RW was recorded in a format other than the audio CD format. Using the CD-RW without erasing all tracks may result in damage to the speakers or other parts caused by sudden loud volume.

#### Discs that cannot be played back

- The following discs cannot be played back: DVD-ROM, DVD-RAM, DVD-RW (recorded in VR format), CD-ROM, CD-I (CD-I Ready), Photo CD, SACD, etc.
- Playing back these discs will generate noise and damage the speakers.
- Damaged discs and discs in an extraordinary shape (other than a disc of 12 cm or 8 cm in diameter) cannot be played back.
- JVC do not guarantee the operation and sound quality of discs not authorized by CD-DA, which is a CD specification.
- Before playback, confirm that the disc complies with this CD specification by checking the marks and reading notes printed on the package.

#### About MP3/WMA/JPEG discs

Playable MP3/WMA/JPEG discs and files

- Discs recorded in the ISO 9660 format are playable (except discs recorded in the "packet write" format (UDF format)).
- Discs recorded in the multi-session format are also playable.
- Files with an extension of ".mp3", ".wma", ".jpg" or ".jpeg" (extensions with uppercase and lowercase letters mixed are also acceptable) are playable.

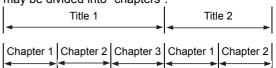
#### Notes on MP3/WMA/JPEG discs and files

- A disc may not be played back, or reading it may take a long time depending on its recording conditions or properties.
- The time needed for reading varies with the number of groups or tracks (files) recorded on the disc.
- If a character other than single byte English characters is used in the file name of an MP3/ WMA/JPEG file, the track/file name will not be displayed correctly.
- The order of tracks/groups displayed on the MP3/WMA Control screen, and the order of files/ groups displayed on the JPEG Control screen may be different from that of files/folders displayed on PC's monitor screen.
- In the case of MP3/WMA discs, since groups/ tracks are played back in alphabetical order, an off-the-shelf MP3/WMA disc may be played back in an order different from that indicated on the label attached to the disc.
- Playing back an MP3/WMA file including a still image may take a long time. The elapsed time is not displayed until playing back starts. If playing back starts, the elapsed time may not be displayed correctly.
- For an MP3/WMA file, a disc with a sampling frequency of 44.1 kHz and transmission rate of 128 kbps is recommended.
- This product is not compatible with MP3i or MP3PRO.
- This product can play back a baseline JPEG file, excluding monochromatic JPEG files.
- This product can play back JPEG data taken with a digital camera conforming to the DCF (Design Rule for Camera File System) standard (when a function is applied such as the automatic rotation function of a digital camera, data goes beyond the DCF standard, so the image may not be displayed).
- If data has been processed, edited and restored with PC image editing software, the data may not be displayed.
- This product cannot play back animations such as MOTION JPEG, or still pictures (TIFF etc.) other than JPEG, and image data with sound.
- The resolution of 640 x 480 pixels is recommended for JPEG files. If a file has been recorded at a resolution of more than 640 x 480 pixels, display may take a long time. An image with a resolution of more than 8 192 x 7 680 pixels cannot be displayed.
- Files recorded on DVD-R/RW discs cannot be played back.

#### **Disc Structure**

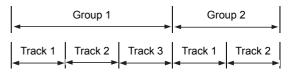
#### **DVD VIDEO**

A DVD VIDEO consists of "titles" and each title may be divided into "chapters".



#### **DVD AUDIO**

A DVD AUDIO consists of "groups" and each group may be divided into "tracks". Some discs include a "bonus group" that requires a password for playing ( page 30).



#### VCD/SVCD/CD

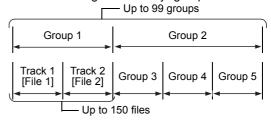
VCD, SVCD and CD consist of "tracks". In general, each track has its own track number. (On some discs, each track may also be further divided by indexes.)



#### MP3/WMA [JPEG] discs

On an MP3/WMA JPEG] disc, each still picture (material) is recorded as a track [file]. Tracks [Files] are usually grouped into a folder. Folders can also include other folders, creating hierarchical folder layers.

This unit simplifies the hierarchical construction of a disc and manages folders by "groups".



This product can recognize up to 1 000 tracks [files] in a disc. Also, the product can recognize up to 150 tracks [files] per group and up to 99 groups in a disc. Since the unit ignores the tracks [files] whose numbers are exceeding 150 and the groups whose numbers are exceeding 99, they cannot be played back.

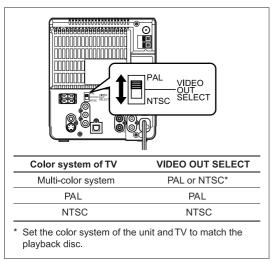
 If there is any type of files other than MP3/WMA [JPEG] files in a disc, those tracks [files] are also counted in the total file number.

## **Selecting the Color System**

This product is compatible with PAL and NTSC color systems.

In standby mode, select PAL or NTSC to match your TV.

If the VIDEO OUT SELECT switch is switched over when the power is on, turn off the power, and then turn it on again.



 Before playing back a disc, it is also required to select the correct MONITOR TYPE in the PICTURE menu according to the aspect ratio of your TV (P page 38).

#### NOTE

 If you play back an NTSC disc with this setting set to "PAL", you can watch the playback pictures (the disc will be reproduced using "PAL 60" format), but the TV screen may rolls over upward and downward rapidly.

- If you play back a PAL disc with this setting set to "NTSC", you can watch the playback pictures, but the following symptoms may occur:
  - The items on the disc menu will be blurred, and be shown slightly shifted when highlighted.
  - The aspect ratio of the picture may differ from the original aspect ratio.
- The picture movement is not smooth.

## **Special Cautions**

## **Notes on Handling**

#### ■Important cautions

#### Installation of the system

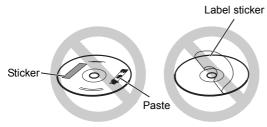
- Select a place which is level, dry and neither too hot nor too cold; between 5°C and 35°C.
- Leave sufficient distance between the system and the TV.
- Do not use the system in a place subject to vibration.

#### Power cord

- Do not handle the power cord with wet hands!
- A small amount of power is always consumed while the power cord is connected to the wall outlet
- When unplugging the power cord from the wall outlet, always pull on the plug, not the power cord.

#### To prevent malfunctions of the system

- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the system.
- Do not use any non-standard shape disc (like a heart, flower or credit card, etc.) available on the market, because it may damage the system.
- Do not use a disc with tape, stickers, or paste on it, because it may damage the system.



#### Note about copyright laws

Check the copyright laws in your country before recording from CDs. Recording of copyrighted material may infringe copyright laws.

#### ■ Safety precautions

#### Avoid moisture, water and dust

Do not place the system in moist or dusty places.

#### Avoid high temperatures

Do not expose the system to direct sunlight and do not place it near a heating equipment.

#### When you are away

When away on travel or for other reasons for an extended period of time, disconnect the power cord plug from the wall outlet.

#### Do not block the vents

Blocking the vents may damage the system.

#### Care of the cabinet

When cleaning the system, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents including disinfectants. These may cause deformation or discoloring.

#### If water gets inside the system

Turn the system off and disconnect the power cord plug from the wall outlet, then call the store where you made your purchase. Using the system in this condition may cause fire or electrical shock.

When condensation or water drops adhere to the lens

In any of the following cases, condensation or water drops may adhere to the lens to prevent the system from working properly:

- · Immediately after roomheating starts
- When the system is installed in a steamy or damp space
- When the system is suddenly moved from a cold place to a warm space

In any of these cases, leave the system turned on for 1 or 2 hours before use.

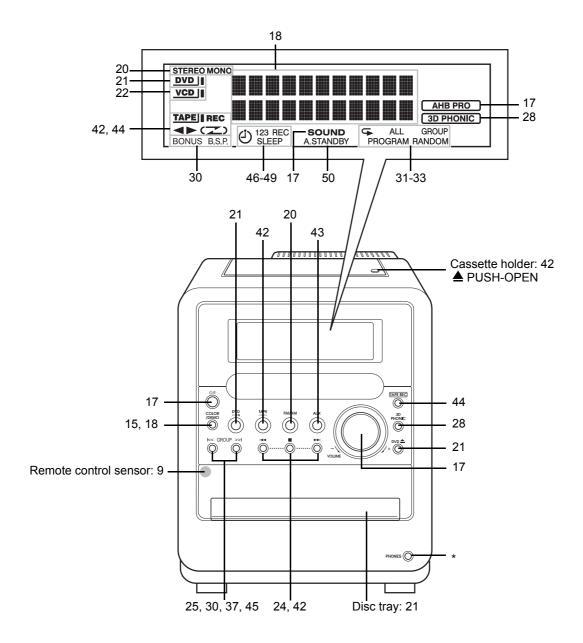
## **Supplied Accessories**

Check to be sure you have all of the supplied accessories.

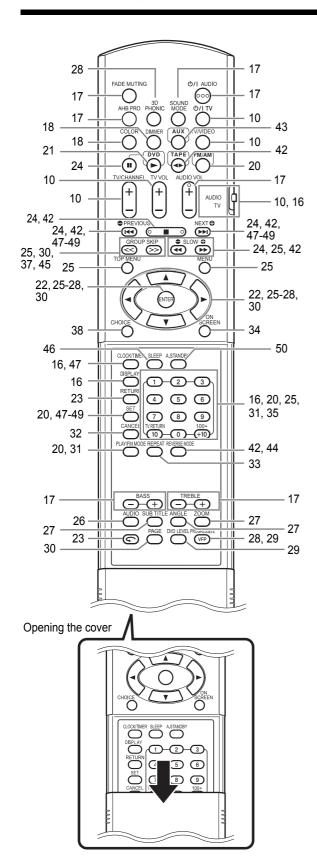
The number in parentheses is the quantity of the pieces supplied. If anything is missing, contact your dealer immediately.

Remote control (1) Batteries (2) FM antenna (1) AM loop antenna (1) Video cord (1)

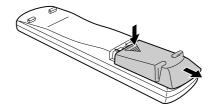
• This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

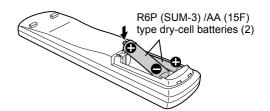


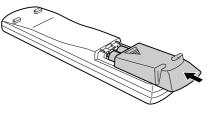
<sup>\*</sup> This terminal is for connecting a pair of headphones equipped with a stereo mini plug (not supplied). While the headphones are connected, the speakers do not produce any sound.



## Inserting Batteries into the Remote Control







#### CAUTION

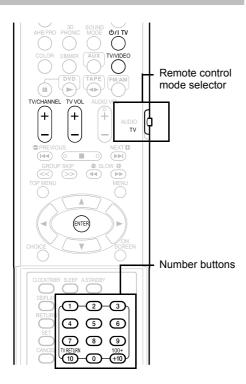
- Do not use a used battery and a new battery together.
- Do not use different types of batteries at the same time.
- Take out the batteries if the remote control is not to be used for a long time. Otherwise it may cause a leakage.

## Remote control operation

- When operating the remote control, point it at the front panel of the main unit.
- The effective distance between the remote control and the remote control sensor on the main unit is approximately 5 m maximum.
- When the effective distance decreases, replace the batteries.
- Do not drop the remote control or subject it to excessive shock.

This page is for when operating your TV using the remote control of this product.

## Operating the TV Using the Remote Control



- Setting the manufacturer's code
- 1 Slide the remote control mode selector to the TV side.



**2** Hold down  $\bigcirc^{0/1 \text{ TV}}$ .

NOTE

• Hold down on until step 4 is completed.

3 Press end release.

## 4 Press number buttons (1-9, 0).

#### Examples:

For a Hitachi TV: Press 1, then 0. For a Toshiba TV: Press 0, then 8. If there are two or more manufacturer's codes, try them in turn and select the one that causes the product to work properly.

Manufacturer	Code	Manufacturer	Code
JVC	01	Samsung	12
Hitachi	10	Sanyo	13
Magnavox	02	Sharp	06
Mitsubishi	03	Sony	07
Panasonic	04, 11	Toshiba	08
Philips	14	Zenith	09
RCA	05		

## 5 Release Only

#### NOTE

 The manufacturer's codes may be changed without notice. You may not be able to operate a TV produced by the manufacturer shown above.

## For TV operation

Operate the remote control by pointing it towards the TV.

Ф/I TV	Turn on/off the power.		
TV/CHANNEL +	Change channels.		
TV VOL + -	Adjust volume.		
1 - 9 / 0 / +10	AUDIO TV 41	Select channels.	
TV RETURN	Change between the previously selected channel and the current channel.		
TV/VIDEO	Change between TV and video input.		

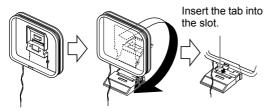
<sup>\*1</sup> Make sure to slide the remote control mode selector to the TV side in advance.

#### NOTE

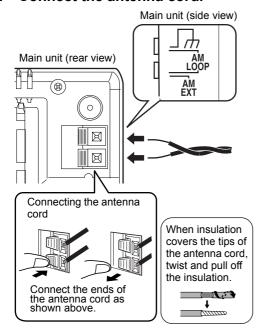
 When the batteries are replaced, perform the manufacturer's code setting again.

## **Connecting the Antennas**

- Connecting the AM antenna
- 1 Set up the AM antenna (supplied).

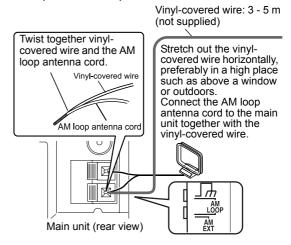


2 Connect the antenna cord.



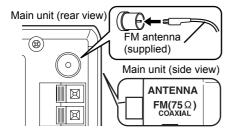
- 3 Turn the AM loop antenna to find the best position for radio reception.
  Place the AM loop antenna as far
  - Place the AM loop antenna as far from the main unit as possible.
  - Do not place the AM loop antenna on a metallic table or close to a TV, computer, or other electric appliances. Doing so may affect radio reception.

■When radio reception with the supplied AM loop antenna is poor

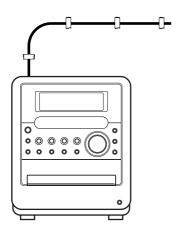


When positioning the antennas, find the best position for reception while listening to an actual radio program (refer to "Listening to Radio Broadcasts" ( page 19)).

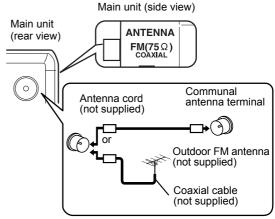
## Connecting the FM antenna



Stretch out the FM antenna to the best position for radio reception, and then fix it with adhesive tape.



■When radio reception with the supplied FM antenna is poor, or when using a communal antenna

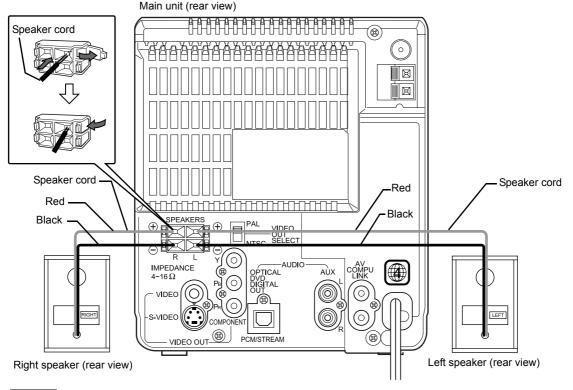


When using an antenna other than those supplied with this product, refer to the operation manuals for the antenna for details of connection.

When positioning the antennas, find the best position for reception while listening to an actual radio program (refer to "Listening to Radio Broadcasts" ( Per page 19)).

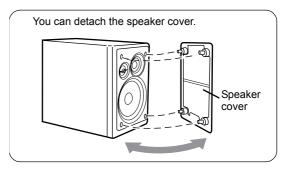
## **Connecting the Speakers**

After connecting the speakers, gently pull on the speaker cords to make sure the cords are firmly connected and do not pull out.



#### CAUTION

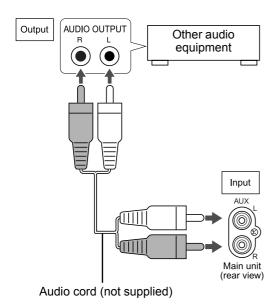
- Do not short-circuit the ⊕ and ⊖ speaker terminals. Doing so may damage the speakers.
- Do not connect other speakers together with the supplied speakers. The change in impedance may damage the main unit and the speakers.
- The speakers of this product are magnetically shielded, but color irregularities may occur on the TV depending on how the speakers are installed. Keep in mind the following.
- Turn off the main power of your TV before installing the speakers. Wait for about 30 minutes before turning on the TV again.
- If color irregularity occurs in pictures, keep a distance of more than 10 cm between the TV and the speakers.



- Improper speaker cord connection spoils the stereo effect and sound quality.
- The impedance of speakers connected to this product must be within the range of 4  $\Omega$  to 16  $\Omega$
- Cooling fan is built into the main unit for emitting generated heat. When you turn on the main unit, the internal cooling fan automatically starts rotating. To ensure sufficient cooling, leave a space of more than 1 cm between the main unit and the speakers or other objects.

## **Connecting Other Equipment**

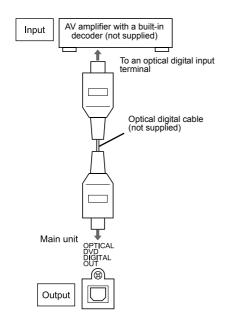
Read this section when connecting other audio equipment to this product.



#### CAUTION

• Before connecting other equipment, turn off both the main unit and the equipment.

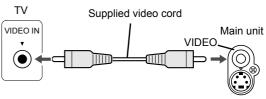
## Connecting with digital equipment



#### CAUTION

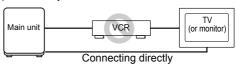
- For details of signals to be output, refer to page 39.
- If connecting the main unit to equipment that has
  the function of a Dolby Digital decoder, the setting in "D. RANGE COMPRESSION" of "AUDIO"
  ( page 39) will be invalid regarding sound
  from the digital audio output of the main unit.

## Connecting with a TV



#### CAUTION

 Connect the main unit directly with a TV (or a monitor) without routing through a VCR. Otherwise it may cause picture distortion while playing back. (Such picture distortion is caused by a copy protection system, and thus it is not a malfunction.)



Also, if the main unit is connected to a TV with a built-in VCR, there may be picture distortion during playback.

#### NOTE

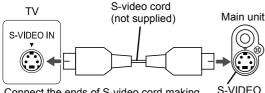
 Please check that the setting for VIDEO OUT SELECT (PAL/NTSC) on the rear panel of the main unit and the color system on your TV set are the same. (Page page 6)

You need to set "MONITOR TYPE" in the "PICTURE" menu correctly according to the aspect ratio of your TV. ( Page 38)

## When a Clearer Picture Is Desired

You can enjoy pictures of better quality using the following cord instead of the supplied video cord.

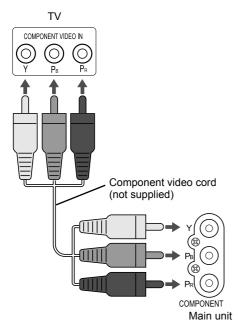
## Connecting by using the S-video cord



Connect the ends of S-video cord making sure that each end matches its compatible terminal

## Connecting by using the component video cord

You can enjoy better quality pictures than when using the S-video cord.



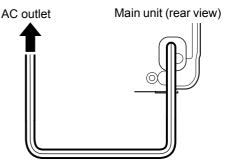
#### CAUTION

 Use one of either the S-video cord or the component video cord. If both cords are used, pictures may not be played back properly.

#### NOTE

- In order to enjoy pictures with the progressive mode ( page 29), the TV is required to have progressive video input.
- If the component video input jacks of your TV are BNC type, use a plug adapter (not supplied) to convert the plugs.

## **Connecting the Power Plug**



 After making all other necessary connections, connect in the power plug.

#### NOTE

- The preset setting such as preset channels and sound adjustment may be erased in a few days in the following cases:
  - When you disconnect the power plug.
  - When a power failure occurs.

## Demonstration display function

When you connect the power plug into the AC outlet, "DEMO START!" appears in the display window and the demonstration display starts.

When you press  $\overset{\text{\tiny COLOR}}{\bigcirc}$  on the main unit, "DEMO

OFF" appears in the display window and the demonstration display is canceled.

Turning on the main unit automatically cancels the demonstration display.

#### Resuming the demonstration display

With the power turned off, press on the main unit.

#### Hiding the demonstration display

With the power turned off, hold down



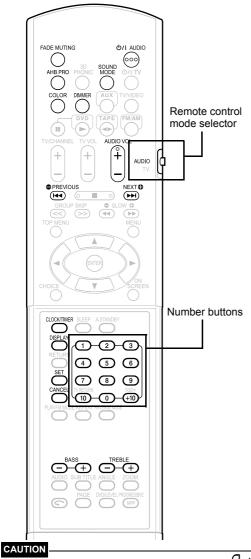
Disconnecting and then reconnecting the power plug does not start the demonstration display.

To activate the demonstration display again,

hold down outil "DEMO START!" appears.

## **Basic Operations**

This manual explains the operations assuming that you will use the remote control. Some buttons on the main unit are the same as those on the remote control. You can use either button in this case.



 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.

## **Setting the Clock**

You can set the clock while the main unit is turned either on or off.

Example: To set the clock to 10:10 a.m.

1 Press CLOCK/TIMER.



#### 2 Set the hour.

PREVIOUS NEXT 

H
Back Next

- Holding down the button causes the hour to increment.
- You can use the number buttons to specify the hour.

Refer to "Using the number buttons" shown below

#### Using the number buttons

Set the remote control mode selector to AUDIO before using the number buttons.



Examples: 3: 3

13:  $(+10) \rightarrow (3)$ 20:  $(+10) \rightarrow (10)$ 

23:  $(+10) \rightarrow (+10) \rightarrow (3)$ 



3 Press <sup>SET</sup>.

10:00

- To return to step 2, press CANCEL.
- 4 Set the minute in the same manner as steps 2 and 3.

10:10

## Adjusting the clock

Press four times to display the clock, and then adjust the clock starting from step 2.

Displaying the clock while using the main unit

Press repeatedly.

- The time display on the main unit is a 24-hour clock.
- The clock will gain or lose approximately 1 minute per month.
- Set the clock again after you have disconnected the power plug or a power cut has occurred.

## **Turning On/Off the Main Unit**

Used frequently

#### ዕ/I AUDIO **Press** (00)



) on the main unit).

• With the power off, pressing either button also turns on the main unit. The function assigned to the button starts working at the same time.

Remote control:







Main unit:





#### NOTE

· Cooling fan is built into the main unit for emitting generated heat. When you turn on the main unit, the internal cooling fan automatically starts rotating.

## Adjusting the Volume

Used frequently

## **Press**



 You can also adjust the volume by turning the VOLUME control on the main unit.

#### NOTE

· You can adjust the volume within the range of 0 to

## **Temporarily Turning Off the** Sound (FADE MUTING)

## FADE MUTING

**Press** 

- "FADE MUTING" appears and the volume reduces to "0".
- To return to the previous volume, press FADE MUTING

again.

## **Emphasizing Heavy Bass** Sound (AHB PRO)

## Press ( )

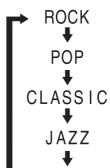
- Each time you press (), AHB PRO function toggles between "ON" and "OFF".
- · While AHB PRO function is activated, АНВ PRO is displayed in the display
- "AHB PRO" stands for "Active Hyper Bass PRO".

## **Adjusting the Sound Quality**

## Selecting the sound mode

## Press MODE

 Each time you press \( \frac{1}{4} \) , the display toggles as follows.



MANUAL

: For emphasizing treble and bass sounds.

: Adequate for songs and narrations.

For emphasizing treble sound.

: For uplifting a feeling of being at a live performance.

: For adjusting treble and bass sounds of your choice (shown below).

Cancels the sound mode (initial setting).

· While the sound mode is set to an item other than "FLAT", SOUND is displayed in the display window.

#### NOTE

· This function does not affect recording sound.

## Adjusting bass/treble sound

- repeatedly to display "MANUĀL".
- For adjusting bass sound;

Press (-)

For adjusting treble sound;

Press (-)-(+).

- · You can adjust the sound quality within the range of -5 to +5.
- The display returns to the sound source display in a few seconds.

#### NOTE

· While the sound mode is set to an item other than "MANUAL", "NO OPERATE" is displayed in the display window and you cannot adjust bass/treble sound.

# **Changing the Color Patterns** for the Display Window and Disc Tray

## Press (or on the main unit).

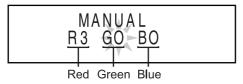
• Each time you press , the display toggles as follows.

RAINBOW : For a rainbow-like pattern. : For a flower-image **FLOWER** pattern. Gradually changes GRADATION: the color pattern in a cycle of approximately 20 seconds. OCEAN : For an ocean-image pattern. : For a fantasy pattern. FANTASY MANUAL : For the color of your choice. (The setting shown on the left is

Setting your favorite color for the display window and disc tray

initial setting.)

- 1 Press repeatedly to display "MANUAL".
- Press PREVIOUS or to select a component color.



 Numerical value of the selected component color flashes.

## 3 Press



### to adjust the intensity

#### of the component color.

- You can also adjust the color intensity by turning the VOLUME control on the main unit.
- You can adjust the color intensity within the range of "0" to "3".

You cannot set all three component colors (red, green, and blue) to "0" at the same time.

#### NOTE

- After you have adjusted each component color, the display returns to the sound source display in approximately 8 seconds.
- You cannot set different colors for the display window and disc tray.
- When you operate a button on the main unit or remote control, the display window and disc tray light in pale blue for approximately 2 seconds.
- When recording finishes, the color of the display window and disc tray switches to the color set in "MANUAL" to inform you that recording has finished. (With an item other than "MANUAL" selected)

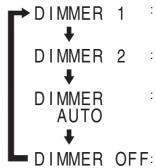
When you operate the main unit after recording finishes, the color pattern for the display window and disc tray returns to the selected pattern.

# Changing the brightness of the display window and disc tray (DIMMER)

## Press OMMER.

NOTE

 Each time you press , the display toggles as follows.



: Color pattern becomes dimmer.

 Color pattern becomes darker, and switches to blue.
 DIMMER 2 is automated.

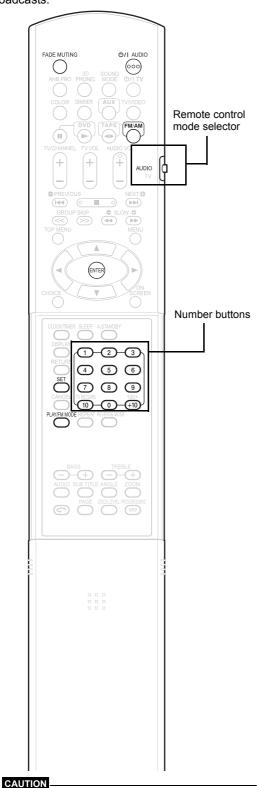
DIMMER 2 is automatically selected during video playback, and is canceled when the playback stops.

Cancels the brightness adjustment

(initial setting).

- Once you press to change the color pattern, the brightness returns to the initial setting. (except for DIMMER AUTO)
- When you turn off the main unit, the brightness also returns to the initial setting.
- You cannot turn off the color pattern.

This product can receive FM and AM radio broadcasts.



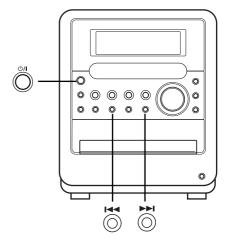
 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



## **Setting the AM Tuner Spacing**

Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.

#### On the main unit ONLY:



#### ■When the main unit is turned off

To select 10 kHz spacing, while holding down on the main unit, press on the main unit to turn on the power. "AM 10 kHz" appears in the display window.

To select 9 kHz spacing, while holding down on the main unit, press on the main unit to turn on the power. "AM 9 kHz" appears in the display window.

#### NOTE

• If the spacing is switched, the memory in which the radio stations were stored will be erased.

## **Selecting a Radio Station**

1 Press repeatedly to select "FM" or "AM".

## Example: Display while an FM radio broadcast is received

Stereo indicator Preset number ( on the right)

FM 1

8 7. 5 0 MH z,

Frequency

Press or or preparedly to select a radio station (frequency).

 You can also select a radio station using the automatic tuning.

#### **Automatic tuning:**

Hold down or well until the frequency starts changing, and then release the button.

When the main unit has received a broadcast, the frequency automatically stops changing.

To quit the function while searching for a broadcast, press PREVIOUS or NEXT (FF).

• When the main unit has received an FM stereo broadcast, "STEREO" lights up.

#### NOTE

- If an FM stereo broadcast is difficult to hear because of noise, you may be able to hear more easily by pressing to switch the sound to monaural reception. In this case, "MONO" lights up. To return the sound to stereo reception, press
- This product is not compatible with AM stereo broadcasts.

## Storing Radio Stations (Preset)

You can store up to 30 FM radio stations and up to 15 AM radio stations.

- ■While the broadcast from the radio station you want to preset is being received
- 1 Set the remote control mode selector to AUDIO.



- 2 Press .
  - The preset number flashes for approximately 5 seconds.
- While the preset number is flashing, press the number buttons (
  - 100 or 100+ to select the preset number you want to use.
  - Refer to "Using the number buttons" (Propage 16).
- 4 While the selected number is flashing, press . SET .
  - "STORED" appears and the selected radio station is stored.

#### NOTE

 When you store a radio station to a preset number to which another radio station has previously been stored, the newly set radio station replaces the previously stored radio station.

## **Tuning In to a Preset Radio Station**

- ■While an FM or AM broadcast is being received
- 1 Set the remote control mode selector to AUDIO.



- 2 Use the number buttons to select the preset number of the radio station to which you want to tune in.
  - Refer to "Using the number buttons" (page 16).

## **Basic Operations of the DVD Player**

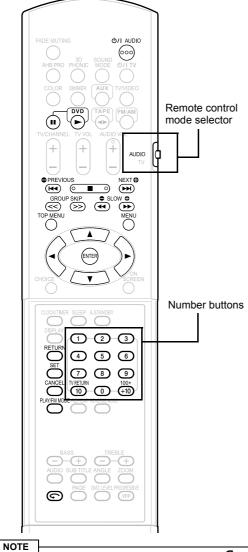
#### How to read this manual

- Operations are described by mainly using the remote control buttons. If there are the same marks on the main unit, the buttons on the main unit can also be used.
- The following marks tell you for which type of the discs the operation can be made.



#### **JPEG**

- The illustrations and TV screens may be different between the actual case and the description.
- "VCD" stands for "Video CD".
- "SVCD" stands for "Super Video CD".



• Set the remote control mode selector to AUDIO AUDIO before using the number buttons. TV



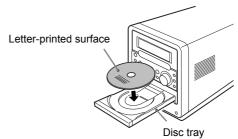
## **Playback**

Used frequently

## DVD DVD VCD SVCD C D

(Refer to page 36 for playing back MP3/WMA and JPEG.)

- 1 Press on the main unit.
  - The disc tray comes out.
- 2 Place a disc on the disc tray.

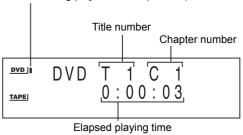


- When you want to listen to an 8 cm disc, place it on the inner hollow of the disc tray.
- 3 Press PvD.
- ■Display for DVD VIDEO

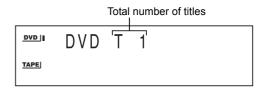
Display while a DVD VIDEO is being played back:

**DVD** indicator

(The DVD indicator lights up while the DVD VIDEO is stopped. The DVD indicator flashes while the DVD VIDEO is being played back or paused.)



#### Display while the DVD VIDEO is stopped:

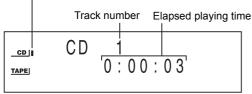


#### ■ Display for CD

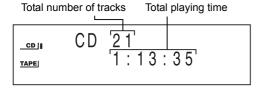
#### Display while a CD is being played back:

CD indicator

(The CD indicator lights up while the CD is stopped. The CD indicator flashes while the CD is being played back or paused.)



#### Display while the CD is stopped:

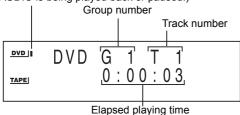


#### ■ Display for DVD AUDIO

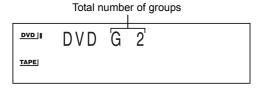
## Display while a DVD AUDIO is being played back:

**DVD** indicator

(The DVD indicator lights up while the DVD AUDIO is stopped. The DVD indicator flashes while the DVD AUDIO is being played back or paused.)



#### Display while the DVD AUDIO is stopped:



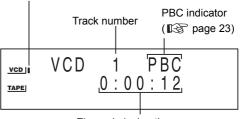
• "G1" and "T1" will appear after the total number of groups is displayed.

#### ■ Display for VCD/SVCD

## Display while a VCD/SVCD is being played back:

VCD indicator

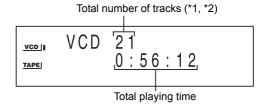
(The VCD indicator lights up while the VCD/SVCD is stopped. The VCD indicator flashes while the VCD/SVCD is being played back or paused.)



Elapsed playing time

PBC indicator is displayed while PBC is activated.

#### Display while the VCD/SVCD is stopped:



- \*1 "1" will appear after the total number of tracks is displayed.
- \*2 "PBC" will appear when the disc is PBC-compatible.

#### NOTE

- The menu may appear in the display window after DVD playback starts. In such a case, select the desired menu item by using the following buttons on the remote control.
- Select a menu item with , or or

and then press .

- Select a menu item with the number buttons.
- Operation may differ from the explanation given here, depending on the disc type.

#### Messages displayed on the TV screen

While a DVD is selected as the sound source, the messages shown below are displayed, depending on the status.

#### **NOW READING**

The main unit is reading the disc. Wait for a while.

#### **REGION CODE ERROR!**

The disc cannot be played back because its region code is not compatible. ( Page page 4)

#### **NO DISC**

No disc is loaded.

#### **OPEN**

The disc tray is opening.

#### **CLOSE**

The disc tray is closing.

#### **CANNOT PLAY**

You are trying to play back an unplayable disc.

## Guide icons temporarily displayed on the TV screen (on-screen guide)



: Play

(**P** page 21)



: Pause ( page 24)



: Fast reverse/Fast forward search

(**I** page 24)





Containing multi-audio



( page 26) : Containing multi-subtitle

(**1** page 27)



: The disc cannot accept the operation you have attempted.

#### PBC (Playback control)

- PBC is a signal recorded in a VCD (version 2.0) for controlling VCD playback.
   You can operate software that has interactive or search functions using the menu display recorded in a PBC-compatible VCD. To play back a VCD without PBC, follow the operation below.
  - Select the desired track number with the number buttons while playback is stopped.
  - While playback is stopped, press PREVIOUS or NEXT to select the desired track num-

ber, and then press

 While a VCD or SVCD is being played back, press error to return to the higher menu group.

## Playing Back from a Position 10 Seconds Before (One Touch Replay)

#### DVD VIDEO

■While a disc is being played back

#### Press ©.

- This operation may not be carried out for some discs.
- · You cannot return to the previous title.

## **Stopping Playback**

Used frequently

### DVD DVD VCD SVCD C D WMA JPEG

■While a disc is being played back

Press **■ ○**.

## **Resuming Playback (RESUME)**

### DVD DVD VCD SVCD

When playback is stopped in the middle, playback can be started from the stopped scene.

#### How to suspend playback

■While a disc is being played back
Perform any of the following operations during playback.

Press once.\*

Press to turn off the power.

Change the source to FM/AM or AUX.\*

\* Even if the power is turned off by pressing

after this, the position where playback has been stopped will be stored.



## How to start playback from the stored position

Press DVD

#### NOTE

- This function does not work in program playback or random playback.
- The position where playback starts again may be a little different from the stopped position.
- When a disc menu is displayed, the resume function may not work.
- The audio, the subtitle and the angle at that time are stored as well as the stopped position.
- The stored position will be cleared if the disc tray is opened. Further, if 
   is pressed during playback, "RESUME" appears. If 
   is pressed at this time, "RESUME" will disappear and the stored information will be cleared.
- Resume function is set to on as the initial preset. You can set the function to off (P page 39).

## **Pausing Playback**

## DVD DVD VCD SVCD C D MP3 JPEG

■While a disc is being played back

## Press (II).

To resume normal playback, press

• Playback cannot be paused by pressing on the main unit during JPEG disc slide-show.

## Advancing Picture Frame by Frame

## DVD VCD DVD AUDIO

(only for moving image)

■While a disc is paused

### Press (II).

- Each time you press (II), picture will be advanced frame by frame.
- You cannot operate this function with on the main unit.

## Fast Reverse/Fast Forward Search Used frequently

## DVD DVD VCD SVCD C D

There are two methods.

■While a disc is being played back

## Press or .

• Each time you press or b, the speed increases as shown below.

• To restore the normal speed, press ( )

## Hold down $\stackrel{\Phi}{\longleftarrow}$ or $\stackrel{\text{NEXT}}{\longleftarrow}$ .

 Fast reverse/fast forward search can be carried out only while the button is pressed.

- For a DVD VIDEO, SVCD or VCD, no sound comes out during fast reverse/fast forward search.
- For a CD or DVD AUDIO, sound is intermittent during fast reverse/fast forward search.

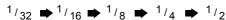
## Slow Motion Playback

## VIDEO VCD SVCD DVD

(only for moving image)

■While a disc is paused

Press ♣ SLOW or ♣ SLOW .
• Each time you press ♣ SLOW, the speed increases as shown below.



• Press (n) to pause playback, and press (n) to resume normal playback.

#### NOTE

- No sound will be produced.
- The picture motion in the reverse direction may not be smooth.
- For a VCD or SVCD, slow motion playback can be carried out in the forward direction only.

#### Skipping to the Beginning of a Track Used frequently

## DVD DVD VCD SVCD C D WMA JPEG

■While a disc is being played back\*

Press ♣PREVIOUS or ♠PP.

- Each time you press PREVIOUS, the current chapter/track/file skips to the beginning of the previous chapter/track/file.
- Each time you press (EN), the current chapter/ track/file skips to the beginning of the next chapter/track/file.
- Press or or select a title or group.

#### NOTE

- \* For a VCD or SVCD, this operation can be carried out only during playback without the PBC function.
- · Except for a DVD VIDEO, this operation can also be carried out while the disc is stopped.
- This operation may not be carried out for some discs

### Skipping to the Beginning of a **Track with the Number Buttons**

## DVD DVD VCD SVCD C D WMA JPEG

- ■While a disc is being played back
- Set the remote control mode selector to AUDIO.



### 2 Press the number buttons (1-10) or (10) to select the track/chapter you want to listen to.

 Refer to "Using the number buttons" (**p** page 16).

#### NOTE

- · You can operate a VCD or SVCD while the disc is stopped or played back with PBC off.
- You can operate a DVD AUDIO, CD, MP3, WMA, or JPEG while the disc is either played back or
- This operation may not be carried out for some discs.

### Selecting a Track from the Menu Screen

## DVD DVD VCD SVCD

- ■While a disc is stopped or being played back\*
- Set the remote control mode selector to AUDIO.



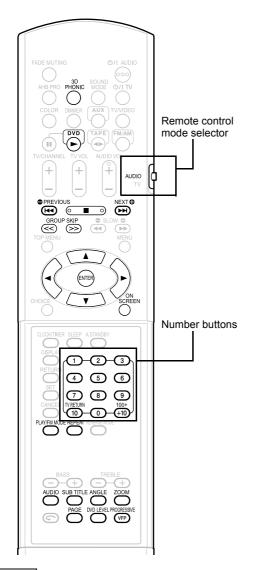
- Press or or or.
  - A menu screen of the disc appears.
  - Only can be used for DVD AUDIOs.
- 3 Press ( ) (only for a

#### DVD VIDEO or a DVD AUDIO) or the number buttons to select a track you want to listen to.

- Refer to "Using the number buttons" (**P** page 16).
- · If there are two or more pages of menu screen, press error or Next to change the pages (only for a VCD or SVCD).
- 4 Press (NTER)

- \* You can operate a VCD or SVCD while PBC is set to off.
- You cannot perform this function with discs to which a menu screen is not recorded.
- · Some disc may start playback even if you do not press (ENTER).

## **Convenient Functions of the DVD Player**



## **Selecting the Audio**

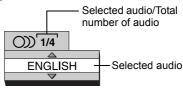
Used frequently

### DVD DVD VCD SVCD

■While a disc containing two or more audio is being played back

## Press AUDIO

**Example: TV screen** 



• Each time you press on, the audio will be changed. The audio can also be changed by pressing (A) (V).

### Wait for a few seconds or press



#### NOTE

- · You can also operate this function by using the menu bar ( page 34).
- For a language code such as "AA", refer to "Language Codes" ( Propage 41).
- When 2 channel sounds are recorded in 1/2 and multi channel sounds with down-mix prohibited are recorded in 2/2 in a DVD AUDIO, you can select 1/2 only.

NOTE

 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



## **Selecting the Subtitle**

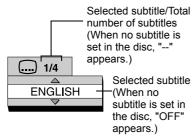
### DVD SVCD DVD AUDIO

(only for moving image)

While a disc containing two or more subtitles is being played back

## 1 Press SUB TITLE.

Example: TV screen



- 2 Press to select a subtitle.
- 3 Wait for a few seconds or press



- You can also operate this function by using the menu bar ( page 34).
- For an SVCD, each time you press in step
   1, the subtitle type and ON/OFF will be changed.
- For a language code such as "AA", refer to "Language Codes" ( P page 41).
- The manner of displaying subtitles may be different depending on the disc.

## Canceling the subtitle

Press of to select "OFF".

## **Selecting a View Angle**

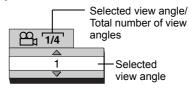
### DVD DVD

(only for moving image)

■While a disc containing two or more view angles is being played back

## 1 Press ANGLE.

#### **Example: TV screen**



• Each time you press on, the angle will be changed. The angle can also be changed by pressing .

### 2 Wait for a few seconds or press



#### NOTE

 You can also operate this function by using the menu bar ( page 34).

## **Magnifying the Picture (ZOOM)**

## DVD VCD SVCD DVD JPEG

(only for moving image)

■While a disc is played back or paused

## 1 Press COM

- Each time you press , the picture magnification will be changed (OFF, ZOOM1 - 6).
- When a JPEG disc is used, the picture magnification changes through "ZOOM 1", "ZOOM 2" to "OFF". You cannot change the picture magnification during slide-show playback.

## 2 Select the portion you want to see



#### CAUTION

 When you magnify a picture, image quality may be deteriorated or image may be distorted.

## **Adjusting the Picture Quality** (VFP)

### DVD DVD VCD SVCD JPEG

■While a disc is played back or paused

#### Press (VFP).

**Example: TV screen** 

Current VFP mode USER1 -GAMMA BRIGHTNESS 0 CONTRAST SATURATION 0 SHARPNESS

#### Setting items

**GAMMA** Controls the brightness of neutral

tints while maintaining the brightness of dark and light

portions.

(Setting range: **-3 - +3**)

BRIGHTNESS: Controls the brightness of the

display.

(Setting range: -8 - +8)

CONTRAST : Controls the contrast of the

display.

(Setting range: -7 - +7)

SATURATION: Controls the saturation of the

display.

(Setting range: -7 - +7)

**TINT** : Controls the tint of the display.

(Setting range: -7 - +7)

SHARPNESS: Controls the sharpness of the

display.

(Setting range: -8 - +8)

### **Press** to select VFP mode.

**NORMAL** : For normal playback.

(You cannot adjust the image

quality.)  $\rightarrow$  Go to step 7.

**CINEMA** Suitable when viewing a movie in

a dim room.

(You cannot adjust the image quality.)  $\rightarrow$  Go to step 7.

USER1/USER2: You can adjust the image quality.

 $\rightarrow$  Go to step 3.

#### Press to select an item you want to adjust.

Press (ENTER)

#### Example:



- Press to change the value.
- Press (ENTER)
  - To adjust other items, go back to step 3.

#### Press (VFP).

#### NOTE

- · If no operation is made for several seconds during the procedure, the settings made so far will be automatically stored.
- "VFP" stands for "video fine processor".

## **Creating Realistic Sound** (3D PHONIC)

### DVD DVD VCD SVCD CD WMA

The two speakers produce an effect resembling surround-sound.

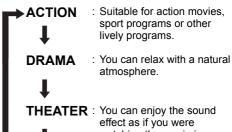
■While a disc is being played back



#### **Example: TV screen**



PHONIC . the display toggles · Each time you press as follows.



watching the movie in a theater.

: Cancels 3D phonic (initial setting).

 While 3D phonic is activated, 3D PHONIC is displayed in the display window.

OFF

- · 3D phonic is effective for both the speakers and headphones.
- · When noise is produced or sound is distorted, set "3D PHONIC" to "OFF".
- You cannot operate some types of DVD AUDIO discs.

## Adjusting Playback Level (DVD LEVEL)

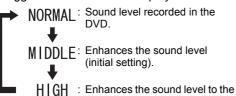
### DVD DVD

The audio of a DVD VIDEO and DVD AUDIO may be recorded at a lower level (volume) than for other types of disc. You can adjust the DVD level.

■While a disc is being played back

## Press OND LEVEL.

• Each time you press on, the display toggles as follows in the display window.



Select the level while listening to the sound played back.

#### NOTE

- · DVD level is effective only for playback of a DVD.
- Even if the DVD level is changed, the output level from the digital audio output terminal will not be changed.
- This function does not affect recording sound.

## **Enjoying Better Pictures** (PROGRESSIVE)

In the progressive mode, you can enjoy better pictures.

#### CAUTION

- In order to enjoy pictures in the progressive mode, the following requirements should be met.
  - There must be component video input terminals on the TV set connected to the main unit.

When the above requirements are not satisfied, leave the main unit in the Interlace mode. If the progressive mode is set, pictures may be distorted.

■While the disc is played back or paused

## Hold down (VFP).

• Each time you press (rep), the display toggles as follows.

#### Interlace mode (initial setting)

INTERLACE



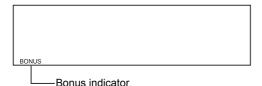
#### Progressive mode

**PROGRESSIVE** 

## Playing Back the Bonus Group

#### DVD

There are some DVD AUDIO discs with a special group, called "bonus group", recorded.



- This operation can be carried out when "BONUS" is lit in the display window on the main unit.
- ■While a disc is being played back
- 1 Set the remote control mode selector to AUDIO.



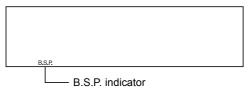
## Press SROUP SKIP repeatedly during playback to select a bonus group.

- "KEY\_\_\_" appears on the TV screen and in the display window on the main unit
- 3 Press the number buttons to enter a pin code (4 digits).
  - The method of getting a pin code is different depending on the disc.
- 4 Press ENTER
  - When a correct pin code is entered, "BONUS" disappears and the playback of the bonus group starts.
  - If an incorrect pin code is entered, try entering a correct pin code again.

## **Browsable Still Pictures** (B.S.P.)

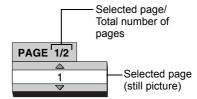
#### DVD

There are some DVD AUDIO discs with still pictures recorded. Among the still pictures, there are pictures called B.S.P. (browsable still pictures). You can change these pictures as if turning over pages.



- This operation can be carried out when "B.S.P." is lit in the display window on the main unit.
- ■While a disc is being played back
- 1 Press .
  - Each time you press , the still picture will be switched over.
  - You can also change the pictures by pressing \_\_\_\_\_.

#### **Example: TV screen**



## 2 Wait for a few seconds or press



## NOTE

 You can operate this function on the menu bar (\$\square\$ page 34).

# Playing Back the Disc in the Desired Order (Program Playback)

## DVD DVD VCD SVCD C D MP3 WMA

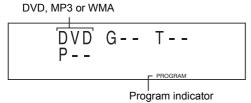
You can program a maximum of 99 chapters or tracks. You can program the same chapter or track more than once.

- ■While a disc is stopped
- 1 Set the remote control mode selector to AUDIO.

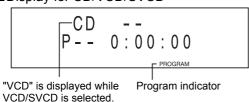
## 2 Press ot select "PROGRAM".

■ Display for DVD VIDEO

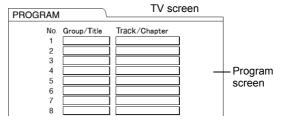
■ Display for DVD AUDIO/MP3/WMA



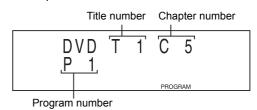
■ Display for CD/VCD/SVCD



#### **Example: For DVD VIDEO**



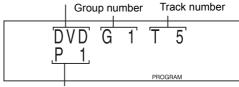
- 3 Press the number buttons (1 10 or 10) to program chapters/tracks.
- Display for DVD VIDEO
  - Select a title number, and then select a chapter number.



#### ■ Display for DVD AUDIO/MP3/WMA

• Select a group number, and then select a track number.

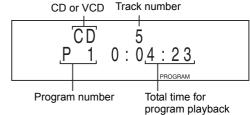
DVD, MP3 or WMA



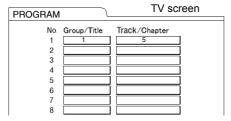
Program number

#### ■Display for CD/VCD/SVCD

Select a track number.



#### **Example: For DVD VIDEO**



- Refer to "Using the number buttons" (page 16).
- Before selecting a bonus group of a DVD AUDIO, cancel the "BONUS" display as explained in "Playing back the Bonus Group" on page 30.
- When you try to enter more than 99 chapters or tracks, "MEMORY FULL" appears.

## 4 Press Prop.

Confirming programmed content

While playback is stopped, press



- During this operation, you can add a track as the last in the program, or erase the last track. ( step 3)
- Canceling program playback

While playback is stopped, press

PLAYFIN MODE repeatedly to display an item

other than "PROGRAM".

• This operation does not erase the pr

 This operation does not erase the programmed content.

Erasing the whole program

While playback is stopped, hold down



#### NOTE

 Ejecting the disc or turning off the main unit also erases the programmed content. This operation also cancels program playback.

## **Random Playback**

## DVD DVD VCD SVCD C D WMA

You can listen to tracks or chapters in random order.

- While playback is stopped
- 1 Press repeatedly to select "RANDOM".

**Example: For CD** 



• "RANDOM" appears in the TV screen.

## 2 Press Prop

NOTE

- Pressing repeatedly does not return playback to the previous track.
- · Each track is played back once.

## Canceling random playback

While playback is stopped, press repeatedly to display an item other than "RANDOM".

#### NOTE

• Ejecting the disc or turning off the main unit also cancels random playback.

## **Repeat Playback**

## DVD DVD VCD SVCD C D

Refer to page 37 for repeat playback of MP3/WMA and JPEG files.

■While a disc is being played back

## Press CEPEAT.

• Each time you press effect, the repeat type will be changed.

#### For DVD VIDEO

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current chapter	CHAP*	REPEAT CHAPTER* <sup>⊊</sup>
Repeats the current title	TITLE	REPEAT TITLE ⊊ALL
Cancels repeat	<b>○</b> OFF	REPEAT OFF

#### For DVD AUDIO

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current track	TRACK*	REPEAT TRACK* ←
Repeats the current group	<b>◯</b> GROUP	REPEAT GROUP GROUP
Cancels repeat	OFF OFF	REPEAT OFF

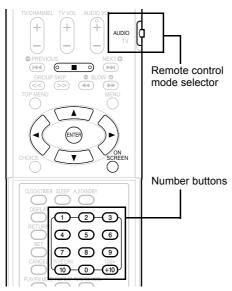
#### For CD/VCD/SVCD

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current track	TRACK*	REPEAT TRACK* ←
Repeats all tracks	ALL ALL	REPEAT ALL ⊊ALL
Cancels repeat	<b>○</b> OFF	REPEAT OFF

<sup>\* &</sup>quot;STEP" is displayed during program playback or random playback.

- For a VCD and SVCD, the operation can be carried out during playback without the PBC function (IPP page 23).
- You can also operate this function on the menu bar ( page 34).
- For details on A-B repeat (repeat playback of a designated part), refer to page 35.

## Status Bar and Menu Bar



DVD DVD VCD SVCD C D

You can display the status bar and menu bar on the TV screen, and can control discs with the bars.

### CAUTION

 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



# Using the Status Bar and Menu Bar

■While a disc is being played back

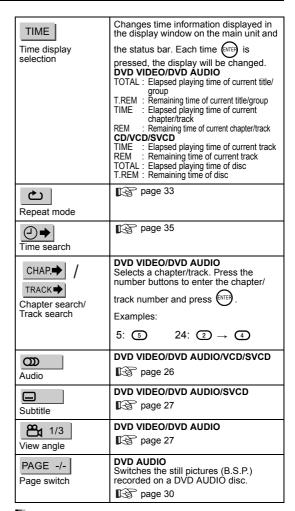
1 Press on twice.



- The above is an example for a DVD VIDEO.
- 2 Press to select an item you want to operate.
- 3 Press (NTER)
  - You can set the selected function. For the setting items, refer to the following "Function list".
  - The currently active function shows blue.
  - To cancel the menu bar, press

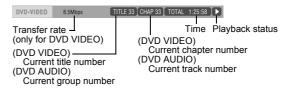
## Function list

Press to select, and press to determine unless otherwise noted.

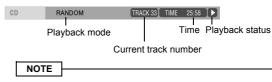


## Information displayed on the status bar

DVD VIDEO/DVD AUDIO (the example below is for a DVD VIDEO)



VCD/SVCD/CD (the example below is for a CD)



 The playback status mark has the same meaning of the mark on the on-screen guide ( page 23).

# Playing Back the Designated Part Repeatedly (A-B Repeat Playback)

## DVD DVD VCD SVCD C D

■While a disc is being played back

- 1 Press CREEN twice.
  - The menu bar ( page 34) appears.
- 2 Press to select off.
- 3 Press (ENTER).
- 4 Press to select
- Press at the starting point of the part to be repeated (designating A point).
  - The icon on the menu bar will be 💩 🕒 ].
- 6 Press at the end of the part to be repeated (designating B point).
  - The icon on the menu bar will be 🖒 A-B ].
    - "\$\subseteq A-B"\$ appears in the display window on the main unit and the part between A and B points is played back repeatedly.

## Canceling A-B repeat playback

- To cancel A-B repeat playback:
  - Press  **●** .
  - Select CAB and press (Select COFF).)

### NOTE

- You can operate a VCD and SVCD while the disc is played back with PBC off.
- A-B repeat playback is possible only within the same title or track. A-B repeat playback cannot be carried out during PBC playback, program playback, random playback and repeat playback.

# Designate the Time (Time Search)

## DVD DVD VCD SVCD C D

- ■While a disc is being played back
- 1 Set the remote control mode selector to AUDIO.



- 2 Press CN twice.
  - The menu bar appears ( P page 34).
- 3 Press ( ) to select (→).
- 4 Press (NTER).
- 5 Enter the time using the number buttons (1-9, 0).

Example: When you want to play back a disc from the position of (0 hour) 23 minutes 45 seconds, press the buttons in the order:

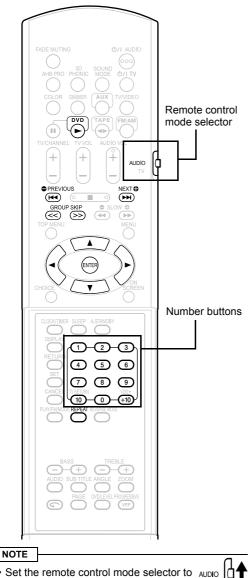


- You can skip entering "minutes" and "seconds".
- If you enter wrong numbers, press delete the numbers, and then enter the numbers again.
- 6 Press even.
  - To delete the menu bar, press

### NOTE

- You may not be able to operate this function depending on the disc.
- This function does not work during program playback or random playback.
- For a CD, this operation can always be carried out. For a VCD or SVCD, the operation can be carried out when the disc is stopped or during playback without the PBC function.
- Time search for a DVD VIDEO is from the beginning of the title, for a DVD AUDIO is from the beginning of the track being played back. Time search for a VCD, SVCD and a CD is as follows:
- When the disc is stopped, time search is from the beginning of the disc.
- When the disc is being played back, time search is within the track currently being played back.

# Playing Back MP3/WMA and JPEG Discs



 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.

## **Playback**



Display of an MP3/WMA disc is described here as an example.

For a JPEG disc, read "track" as "file".

#### NOTE

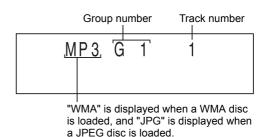
 When playing back a disc containing both MP3/ WMA and JPEG files, set one of them to be played ( page 38).

## Insert a disc.

#### **Example: TV screen**

This indicator lights up during repeat playback This indicator lights up ( page 37). during program playback Elapsed playing time of ( page 31). the selected track Group list (only for MP3/WMA). PROGRAM REPEAT STEP Time 00:02:15 FILE Track: 1/6 (Total 128)
1. begonia.mp3 Group: spring summe german chamomile.mp3 kiwi fruit.mp3 winter orchard grass.mp3 montain Track Inform petunia.mp3 north pale.mp3 Title begonia Artist Album Voice Tag information of the Track list (Tracks conselected track tained in the selected (only for MP3s/WMAs) group)

#### **Example: Display window**



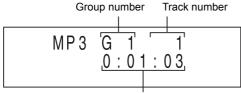
- Press to select a group.
  - **Press** to move to the track list. Pressing (
     returns to the group list.

(Continued on next page)

## 4 Press to select a track.

# 5 Press or or

**Example: Display during playback** 



Elapsed playing time (This indicator is not displayed while a JPEG is loaded.)

- At first, a track title (file name) is scrolled.
- When an MP3 or WMA is loaded, tag information (title/artist/album) is scrolled followed by a track title.
- Only alphanumerical one-byte characters are displayed properly as a track title or tag information.

#### NOTE

- You can also use especial and solution and
- You can also use the number buttons in step 4. In this case, steps 3 and 5 are not needed. Refer to "Using the number buttons" ( page 16).
- You can also use PREVIOUS or I in step 4. In this case, step 3 is not needed.

## Slide-show playback JPEG

- For a JPEG disc, when you press in step 5, files are continuously played back from the selected file (slide-show playback). When you press only a selected file is played back.
- A file is displayed for approximately 3 seconds in a slide-show playback.
- After all files are played back, the playback is automatically stopped.

## Repeat Playback

#### MP3 WMA JPEG

■While a disc is being played back

Press C.

Repeat types	Display on the TV screen	Display display wi the mai	ndow on
Repeats the current track (only for MP3/ WMA)	REPEAT TRACK*	REPEAT* TRACK	Ç
Repeats the current group	REPEAT GROUP	REPEAT GROUP	GROUP
Repeats the entire disc	REPEAT ALL	REPEAT ALL	ÇALL
Cancels repeat playback	No display	REPEAT OFF	

<sup>\* &</sup>quot;STEP" is displayed during program playback and random playback.

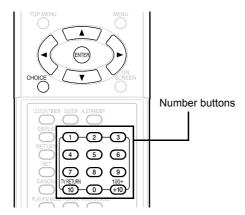
#### NOTE

- The repeat types can also be changed while the disc is stopped.
- The repeat playback is automatically canceled if there is a file that cannot be played back

( page 4).

## **Preferences**

## DVD DVD VCD SVCD C D MP3 JPEG



You can change the initial settings of this product according to the environment the product is used in

#### CAUTION

• Set the remote control mode selector to AUDIO AUDIO before using the number buttons. TV



#### NOTE

 The top and bottom of the preference screen may not be displayed on a wide TV. Adjust the picture size on the TV.

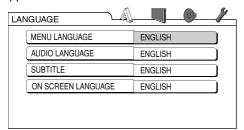
## **Basic Operations**

This section explains basic operation for changing various settings.

■While a disc is stopped or no disc is loaded (while "NO DISC" is displayed)

## 1 Press CHOICE.

 "SETTING" appears in the display window on the main unit and the following screen appears on the TV.



 Proceed with operations by following the description on the TV screen.

## **LANGUAGE**

#### NOTE

- If the selected language is not recorded on the disc, the optimum language set for the disc appears.
- For a language code such as "AA", refer to the "Language Codes" ( Page 241).

Items	Contents
MENU LANGUAGE	Select the language for the DVD VIDEO menu.
AUDIO LANGUAGE	Select the audio language for the DVD VIDEO.
SUBTITLE	Select the subtitle language for the DVD VIDEO.
ON SCREEN LANGUAGE	Select the language displayed on the preference screens.

# **PICTURE**

Items	Contents ( : initial setting)	
MONITOR TYPE	Select a display method suitable for your TV. 16: 9 /16: 9 MULTI (wide TV): Select this item when the aspect ratio of your wide TV is fixed to 16:9 (when playing back a DVD VIDEO recorded at 4:3, this product automatically adjusts the screen width of the output signal).	
	4:3 LB/4:3 MULTI LB (letter box): Select this item when the aspect ratio of your TV is conventional 4:3. While viewing a wide screen picture, the black bars appear on the top and bottom of the screen.	
	4:3 PS/4:3 MULTI PS (pan scan): Select this item when the aspect ratio of your TV is conventional 4:3. While viewing a wide screen picture, the left and right edges of the picture will not be shown on the screen. (If the disc is not compatible with the pan scan, the picture will be displayed at the letter box ratio.)	
PICTURE SOURCE	Select an item suitable to the video source.  VIDEO: Select this item when you want to view a normal video.  FILM: Select this item when you want to view a film or video recorded with the progressive scan method.  AUTO: The video source type (a video or film) is automatically selected.	
SCREEN SAVER	Select the screen saver mode between ON/OFF (screen saver activates when there is no operation made for about 5 minutes since a still picture was last displayed).	
FILE TYPE	If a disc includes an AUDIO file (MP3/WMA) and a still picture file (JPEG), select which file is played back. If you change this setting, open and close the disc tray, or momentarily turn off the main unit. (A disc either with audio files or still picture files can be played back regardless of this setting.)	

# O AUDIO

Items	Contents ( : initial setting)		
DIGITAL AUDIO OUTPUT	Select an output signal type from the following in accordance with the equipment connected to the digital audio output terminal (AV amplifier, etc.). (See the list below for the preference items and output signal.)		
	PCM ONLY: Equipment corresponding only to linear PCM.		
	DOLBY DIGITAL/PCM: Dolby digital decoder or equipment having the same function.		
	STREAM/PCM: DTS/Dolby digital decoder or equipment having the same function.		
DOWN MIX	Switch signal from the digital output terminal of the DVD VIDEO according to the connected equipment. Select this when Digital Audio Output is set to "PCM ONLY"		
	DOLBY SURROUND: A dolby pro logic decoder-built-in equipment.		
	STEREO: An ordinary equipment.		
	When 3D phonic is activated, Down Mix does not work.		
D (Dynamic). RANGE COMPRESSION	To make adjustments for the difference between a high volume and a low volume when playing back with low volume (only for a DVD recorded with Dolby digital).		
	AUTO : D. range compression automatically works.		
	ON: D. range compression always works.		



Items	Contents ( : initial setting)		
RESUME	( page 24)		
ON SCREEN GUIDE	Select whether you display guide icons on the on-screen guide indicating status of a disc/main unit (For details on the guide icons, refer to page 23)		
AV COMPU LINK MODE	When you want to control JVC TV by using this product, select a mode that matches the terminal from the following. (For more details, refer to "Using AV COMPU LINK" on page 51.)		
	DVD1: Connect to the video-3 input on the TV set.		
	DVD2: Connect to the video-1 input of the TV set.		
	DVD3: Connect to the video-2 input of the TV set.		
PARENTAL LOCK	Set the parental lock function to cut off violent scenes or replace the scenes with others. (This is effective only for discs equipped with the parental lock function.)		
	COUNTRY CODE ( Page 40) Select your country or area.		
	SET LEVEL: The restriction is stricter as the number becomes smaller. "NONE" is no restriction.		
	PASSWORD (essential): Enter four-digit number as your password using the number buttons (1-9, 0) every time. (Enter "8888" if you forget your password.) The password is required at the time of playback.		
	If you enter a wrong password three times,     "EXIT" will be automatically selected.		

# List of relationships of DIGITAL AUDIO OUTPUT preference items and output signal

Playback disc	DIGITAL AUDIO OUTPUT preference		
Flayback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
48 kHz, 16/20/24 bits Linear PCM DVD VIDEO 96 kHz linear PCM DVD VIDEO	48 kHz, 16 bits stereo linear PCM		
48/96/192 kHz, 16/20/24 bits linear PCM DVD AUDIO	48 kHz, 16 bits stereo linear PCM		
44.1/88.2/176.4 kHz, 16/20/24 bits linear PCM DVD AUDIO	44.1 kHz, 16 bits stereo linear PCM		
DTS DVD VIDEO	DTS bit stream 48 kHz, 16 bits stereo linear PCM		stereo linear PCM
DOLBY DIGITAL DVD VIDEO/ DVD AUDIO	DOLBY DIGITAL bit stream 48 kHz, 16 bits stereo line PCM		48 kHz, 16 bits stereo linear PCM
CD/VCD/SVCD	44.1 kHz, 16 bits stereo linear PCM/48 kHz, 16 bits linear PCM		
DTS CD	DTS bit stream 44.1 kHz, 16 bits linear PCM		oits linear PCM
MP3/WMA disc	32/44.1/48 kHz, 16 bits linear PCM		

NOTE

<sup>•</sup> For a DVD VIDEO without content protection set, there is a 20 bit or 24 bit output at the digital audio output terminal.

# **Country/Area Codes**

AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
Al	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
ΑZ	Azerbaijan
ВА	Bosnia and
	Herzegovina
ВВ	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
ВО	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling)
	Islands
CF	Central African
	Republic
CG	Congo
СН	Switzerland
CI	Côte d'Ivoire
CK	Cook Islands
CL	Chile
CM	Cameroon
CN	China
CO	
	Colombia
CR	Costa Rica
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
	Dominican Republic
DO	
DO DZ	Algeria
DO DZ EC	Algeria Ecuador
DO DZ EC EE	Algeria Ecuador Estonia
DO DZ EC EE EG	Algeria Ecuador Estonia Egypt
DO DZ EC EE	Algeria Ecuador Estonia

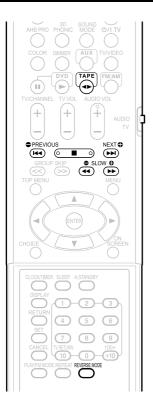
ES	Spain	
ET	Ethiopia	
FI	Finland	
FJ	Fiji	
FK	Falkland Islands	
110		
A	(Malvinas)	
FM	Micronesia	
	(Federated States of)	
FO	Faroe Islands	
FR	France	
FX	France, Metropolitan	
GA	Gabon	
GB	United Kingdom	
GD	Grenada	
GE	Georgia	
GF	French Guiana	
GH	Ghana	
GI	Gibraltar	
GL	Greenland	
GM	Gambia	
GN	Guinea	
GP	Guadeloupe	
GQ	Equatorial Guinea	
GR	Greece	
GS	South Georgia and	
	the South Sandwich	
	Islands	
GT	Guatemala	
GU	Guam	
GW	Guinea-Bissau	
GY	Guyana	
HK	Hong Kong	
HM	Heard Island and	
	McDonald Islands	
HN	Honduras	
HR	Croatia	
HT	Haiti	
HU	Hungary	
ID	Indonesia	
IE	Ireland	
IL	Israel	
IN	India	
Ю	British Indian Ocean	
	Territory	
IQ	Iraq	
İR	Iran (Islamic Republic of)	
IS	Iceland	
IT		
	Italy	
JM	Jamaica	
JO	Jordan	
JΡ	Japan	
KE	Kenya	
KG	Kyrgyzstan	
KH	Cambodia	
KI	Kiribati	
KM	Comoros	
KN	Saint Kitts and Nevis	
KP	Korea, Democratic	
	People's Republic of	
KR	Korea, Republic of	
KW	Kuwait	
KY	Cayman Islands	
	Kazakhstan	
KZ		
LA	Lao People's	
	Democratic Republic	

LC Saint Lucia	
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libyan Arab
	Jamahiriya
MA	Morocco
MC	Monaco
MD	Moldova, Republic of
MG	Madagascar
MH	Marshall Islands
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana
	Islands
MQ	Martinique
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU NZ	Niue New Zealand
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru Francia
PF	French Polynesia
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and
	Miquelon
PN	Pitcairn
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Réunion
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Sevchelles

SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan
33	
014	Mayen
SK	Slovakia
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Sao Tome and Principe
SV	El Salvador
SY	Syrian Arab Republic
SZ	Swaziland
TC	Turks and Caicos
10	
TD	Islands
TD	Chad
TF	French Southern
	Territories
TG	Togo
TH	Thailand
TJ	Tajikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	
	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania, United
	Republic of
UA	Ukraine
UG	Uganda
UM	United States Minor
	Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	
VΑ	Vatican City State
	(Holy See)
VC	Saint Vincent and the
	Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (U.S.)
VN	Viet Nam
VU	Vanuatu
WF	Wallis and Futuna
	Islands
\/\C	
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
	South Africa
ZA	
ZA ZM	Zambia
	Zambia Zaire

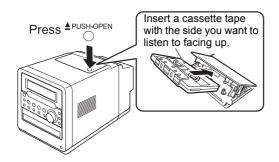
# **Language Codes**

AA Afar MK Macedonian AB Abkhazian ML Malayalam AF Afrikaans MN Mongolian AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian TG Tajik Is Indiana SW Swedish In Indonesian TG Tajik Is Indiana SW Swedish Is Ingala VO Volapuk KN Kanada TT Tatar	Code	Language	Code	Language
AF Afrikaans MN Mongolian AM Ameharic MO Moldavian AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norvegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GN Guarani SO Somali GN Guarani SO Somali GN Guarani SO Somali HH Hindi SS Siswati HR Croatian TR Tamil HR Croatian TR Tamil IK Inupiak TE Telugu IK	AA	Afar	MK	Macedonian
AM Ameharic MC Moldavian AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian TS Sesotho HU Hungarian SV Swedish IA Interlingua SW Swahili IE Interlingua SW Swahili IE Interlingua TA Tamil KU Rusian KU Rusian FI Tagalog KA Garen IT Tatar KO Korean (KOR) TT Tatar KO Korean (KOR) TW Willian KU Kurdish UR UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LU Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	AB	Abkhazian	ML	
AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish II Interlingua SW Swahili II Interlingua TA Tamil III Interlingua TK Turkmen JW Javanese TL Tagalog KK Razakh TO Tonga KK Kazakh TO Tonga KK Kasahmir UK Ukrainian KK Kasahmi	AF	Afrikaans	MN	
AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati IH Hindi SS Siswati IK Inupiak TE Telugu IK Interlingua SW Swahili IK Inupiak TE Telugu IK Interlingua TA Tamil IK Inupiak TE Telugu IK Urrimen JW Javanese TL Tagalog IK Greenlandic TR Turkish IK Lattin VI Vietnamese		Ameharic	МО	Moldavian
AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Kirundi EL Greek RO Rumanian ED Esperanto RU Russian ET Estonian RW Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Guarani SO Somali GU Gujarati SQ Albanian HH Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish II Interlingue TA Tamil IIK Inupiak TE Telugu IIN Indonesian TG Tajik IIN Indonesian TS Tsonga KK Azakh TO Tonga KK Azakh TO Tonga KK Asahmiri UK Ukrainian KK Kazakh TO Tonga KK Kashmiri UK Ukrainian KU Kurdish UR Ukrainian KK Kazakh TO Tonga KK Kashmiri UK Ukrainian KU Kurdish UR Ukrainian KU Kurdish UR Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu		Arabic		
AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish IA Interlingua SW Swedish IA Interlingua SW Swedish IK Inupiak TE Telugu IN Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KK Kazakh TO Tonga KK Sashmiri UK Ukrainian KK Karakh TO Tonga KK Sashmiri UK Ukrainian KK Karakh TO Tonga KK Kashmiri UK Ukrainian KK Karakh TO Tonga KK Kashmiri UK Ukrainian KK Karakh TO Tonga KK Kashmiri UK Ukrainian KK Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KK Kashmiri UK Ukrainian KK L Lattin VI Vietnamese LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
BA Bashkir BE Byelorussian BC Bulgarian BH Bihari BH Bihari BI Bislama BC C Occitan BN Bengali, Bangla BN Bengali, Bangla BR Breton CA Catalan CC Corsican CC Catlan CC Corsican CC Corsican CC Catlan CC Corsican CC Catlan CC Corsican CC Corsican CC Catlan CC Catlan CC Corsican CC Catlan CC Catlan CC Catlan CC Catlan CC Corsican CC Catlan CC Corsican CC Catlan CC		•		
BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kiryarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IK Galenia NN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Karphiz Uz Uzbek KA Latin VI Vietnamese LK Kirghiz Uz Uzbek LA Latin VI Vietnamese LK Lithuanian XH Kirundi LK Lorotalan TS Toorota LK Lithuanian XH Kirundi LK Lorotalan TS Toorota LK Latin VI Vietnamese LK Kirghiz UZ Uzbek LA Latin VI Vietnamese LK Lithuanian XH Kirundi LK Lorotalan TG Tajik LK Lithuanian XH Kirundi LK Lithuanian XH Kirundi LK Lithuanian XH Kyoruba LK Latin VI Vietnamese			_	
BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingua TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KK Sashmiri UK Ukrainian KK Kazakh TO Tonga KK Karakh TO Tonga KK Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IIA Interlingue TA Tamil IIK Inupiak TE Telugu IIN Indonesian TG Tajik IIN Indonesian TG Tajik KA Gaerian SN Shona KK Razakh TO Tonga KK Razakh UR				
BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KK Razakh TO Tonga KK Razakh TO Tonga KK Razakh TO Tonga KK Kazakh TO Tonga KK Kazakh TO Tonga KK Karahi UK Ukrainian KU Kurdish UK Ukrainian		•		
BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish HR Croatian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TS Tsonga KN Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KN Kannada TT Tatar KO Korean (KOR) TW Twi KN Kannada TT Tatar KO Korean (KOR) TW Twi KN Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LU Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kazakh TO Tonga KK Karaha UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LU Kurdish UK Ukrainian LU Lithuanian LU Lithuanian LU Lithuanian LU Lithuanian LU Lithuanian LU Lithuanian LU Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
BR         Breton         PA         Panjabi           CA         Catalan         PL         Polish           CO         Corsican         PS         Pashto, Pushto           CS         Czech         PT         Portuguese           CY         Welsh         QU         Quechua           DA         Danish         RM         Rhaeto-Romance           DZ         Bhutani         RN         Kirundi           EL         Greek         RO         Rumanian           ED         Esperanto         RU         Russian           EO         Esperain         SD         Sindhi           FI         Fiji         SH         Serbo-Croatian           FO         Faroese <td></td> <td></td> <td></td> <td></td>				
CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian ST Sesotho HU Hungarian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kasakh TO Tonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala WO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LU Latvian, Lettish YO Yoruba MG Malagasy ZU Zuliu			_	
CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FV Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GD GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SU Sundanese HY Armenian SU Swedish IA Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW TW KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LV Latvian, Lettish VO Yoruba MG Malagasy ZU Zulu MGG Malagasy ZU Zulu				
CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SU Sundanese HY Armenian SU Sundanese HY Armenian SU Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kasakh TO Tonga KK Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk KO Malagasy ZU Zulu				
CY         Welsh         QU         Quechua           DA         Danish         RM         Rhaeto-Romance           DZ         Bhutani         RN         Kirundi           EL         Greek         RO         Rumanian           EO         Esperanto         RU         Russian           ET         Estonian         RW         Kinyarwanda           EU         Basque         SA         Sanskrit           FA         Persian         SD         Sindhi           FI         Finnish         SG         Sangho           FJ         Fiji         SH         Serbo-Croatian           FO         Faroese         SI         Singhalese           FY         Frisian         SK         Slovak           GA         Irish         SL         Sl				
DADanishRMRhaeto-RomanceDZBhutaniRNKirundiELGreekRORumanianEOEsperantoRURussianETEstonianRWKinyarwandaEUBasqueSASanskritFAPersianSDSindhiFIFinnishSGSanghoFJFijiSHSerbo-CroatianFOFaroeseSISinghaleseFYFrisianSKSlovakGAIrishSLSlovenianGDScots GaelicSMSamoanGLGalicianSNShonaGNGuaraniSOSomaliGUGujaratiSQAlbanianHAHausaSRSerbianHIHindiSSSiswatiHRCroatianSTSesothoHUHungarianSUSundaneseHYArmenianSVSwedishIAInterlinguaSWSwahiliIEInterlingueTATamilIKInupiakTETeluguINIndonesianTGTajikISIcelandicTHThaiIWHebrewTITigrinyaJIYiddishTKTurkmenJWJavaneseTLTagalogKAKazakhTOTongaKLGreenlandicTRTurkishKMCambodianTSTsonga </td <td></td> <td></td> <td></td> <td></td>				
DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fijji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajjik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Garbia URU Vietnamese KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IIA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy  ZU Zulu			_	
ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	EO	Esperanto	RU	
FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish HA Interlingua SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	ET	•		Kinyarwanda
FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish HR Croatian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	EU	Basque	SA	Sanskrit
FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish HR Croatian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gaenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	FA	Persian	SD	Sindhi
FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	FI	Finnish	SG	Sangho
FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	FJ	Fiji	SH	Serbo-Croatian
GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu		Faroese		Singhalese
GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	FY	Frisian	SK	Slovak
GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	GA	Irish		Slovenian
GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	GD	Scots Gaelic		Samoan
GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	GL	Galician		
HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu		•		
HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
HY       Armenian       SV       Swedish         IA       Interlingua       SW       Swahili         IE       Interlingue       TA       Tamil         IK       Inupiak       TE       Telugu         IN       Indonesian       TG       Tajik         IS       Icelandic       TH       Thai         IW       Hebrew       TI       Tigrinya         JI       Yiddish       TK       Turkmen         JW       Javanese       TL       Tagalog         KA       Georgian       TN       Setswana         KK       Kazakh       TO       Tonga         KL       Greenlandic       TR       Turkish         KM       Cambodian       TS       Tsonga         KN       Kannada       TT       Tatar         KO       Korean (KOR)       TW       Twi         KS       Kashmiri       UK       Ukrainian         KU       Kurdish       UR       Urdu         KY       Kirghiz       UZ       Uzbek         LA       Latin       VI       Vietnamese         LN       Lingala       VO       Volapuk      <				
IA       Interlingua       SW       Swahili         IE       Interlingue       TA       Tamil         IK       Inupiak       TE       Telugu         IN       Indonesian       TG       Tajik         IS       Icelandic       TH       Thai         IW       Hebrew       TI       Tigrinya         JI       Yiddish       TK       Turkmen         JW       Javanese       TL       Tagalog         KA       Georgian       TN       Setswana         KK       Kazakh       TO       Tonga         KL       Greenlandic       TR       Turkish         KM       Cambodian       TS       Tsonga         KN       Kannada       TT       Tatar         KO       Korean (KOR)       TW       Twi         KS       Kashmiri       UK       Ukrainian         KU       Kurdish       UR       Urdu         KY       Kirghiz       UZ       Uzbek         LA       Latin       VI       Vietnamese         LN       Lingala       VO       Volapuk         LO       Laothian       WO       Wolof <tr< td=""><td></td><td></td><td></td><td></td></tr<>				
IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
IK     Inupiak     TE     Telugu       IN     Indonesian     TG     Tajik       IS     Icelandic     TH     Thai       IW     Hebrew     TI     Tigrinya       JI     Yiddish     TK     Turkmen       JW     Javanese     TL     Tagalog       KA     Georgian     TN     Setswana       KK     Kazakh     TO     Tonga       KL     Greenlandic     TR     Turkish       KM     Cambodian     TS     Tsonga       KN     Kannada     TT     Tatar       KO     Korean (KOR)     TW     Twi       KS     Kashmiri     UK     Ukrainian       KU     Kurdish     UR     Urdu       KY     Kirghiz     UZ     Uzbek       LA     Latin     VI     Vietnamese       LN     Lingala     VO     Volapuk       LO     Laothian     WO     Wolof       LT     Lithuanian     XH     Xhosa       LV     Latvian, Lettish     YO     Yoruba       MG     Malagasy     ZU     Zulu				
IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu			Ŧ0	T "1"
IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				Turkmen
KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
KL Greenlandic TR Turkish  KM Cambodian TS Tsonga  KN Kannada TT Tatar  KO Korean (KOR) TW Twi  KS Kashmiri UK Ukrainian  KU Kurdish UR Urdu  KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu				
KMCambodianTSTsongaKNKannadaTTTatarKOKorean (KOR)TWTwiKSKashmiriUKUkrainianKUKurdishURUrduKYKirghizUZUzbekLALatinVIVietnameseLNLingalaVOVolapukLOLaothianWOWolofLTLithuanianXHXhosaLVLatvian, LettishYOYorubaMGMalagasyZUZulu				
KN Kannada TT Tatar  KO Korean (KOR) TW Twi  KS Kashmiri UK Ukrainian  KU Kurdish UR Urdu  KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu	KM		TS	Tsonga
KS Kashmiri UK Ukrainian  KU Kurdish UR Urdu  KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu	KN		TT	
KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu		Korean (KOR)	TW	Twi
KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu				Ukrainian
LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
MG Malagasy ZU Zulu				
				Yoruba
			ZU	Zulu



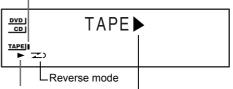
	Operation		
Stop	Press ••.		
Fast forward/ Rewind	Press PREVIOUS  • When a cassette tape is played back in the normal direction (►), PREVIOUS  • When the cassette tape is played back in the normal direction (►), PREVIOUS  • When the cassette tape is played back in the opposite direction (◄), PREVIOUS  • STATE OF THE VIOLENT OF STATE OF THE VIOLENT OF TH		

## 1 Insert a cassette tape.



Cassette tape indicator

(The cassette tape indicator lights up while the cassette tape is stopped. The cassette tape indicator flashes while the cassette tape is being played back.)



Cassette tape playback direction (►: normal direction/◄: opposite direction)

#### CAUTION

- Before using a cassette tape, wind up any slack in the cassette tape. ( page 52)
- Do not use long cassette tapes such as C-120 or C-150. Long cassette tapes are thin and stretch easily, and may become tangled in the inner part of the main unit.
- This product is compatible with playback of TYPE I cassette tapes. Playback of TYPE II or TYPE IV cassette tapes is not recommended, because this product does not meet the specifications for these tapes. The main unit does not produce the proper sound from these cassette tape types.

# 2 Press repeatedly to select the reverse mode.

: For one return playback of both sides.

: For repeated playback of both sides (Playback continues until playback is stopped.)

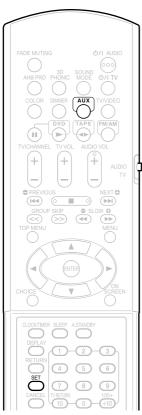
: For one-way playback of either side.

## 3 Press TAPE.

- Playback starts.
- When the main unit is turned off, pressing

  (TAPE) automatically turns on the main unit.
- Each time you press , the cassette tape playback direction changes. The initial playback direction after you have inserted a cassette tape is always the normal direction.
- The cassette tape playback direction indicator facing right 
   is displayed during normal playback. The indicator facing left 
   is displayed during reverse playback.

# **Listening to Other Equipment**



1 Press O.

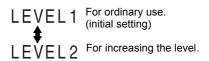


- 2 Start other equipment playback.
  - Refer to the operation manual for the connected equipment.
- 3 Adjust the volume and make other necessary settings.
  - For adjusting the volume and making other necessary settings, refer to "Basic Operations" ( page 17).

# Adjusting the Sound Input Level from Other Equipment

Adjusting the sound input level of the AUX

- 1 Press O.
- Hold down in until the input level appears.
  - Each time you hold down , the display toggles as follows.

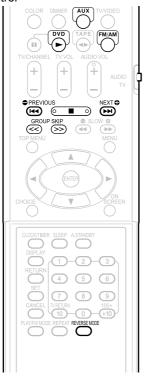


## Recording Sound to Cassette Tapes Used frequently

Main unit



Remote control



### NOTE

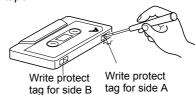
- · The sound input level during recording is automatically adjusted.
- When you record tracks from a disc, a 4-second blank is inserted between tracks in the recording. You can record tracks with no blank time. (**L** page 45)

## CAUTION

- · It may be unlawful to record or playback copyright material without the consent of the copyright owner.
- Do not use long cassette tapes such as C-120 or C-150. Long cassette tapes are thin and stretch easily, and may become tangled in the inner part of the main unit.
- · Since this product is not compatible with TYPE II and TYPE IV cassette tapes, do not use these types of cassette tapes. This product does not meet the specifications for these tapes, so sound is not properly recorded to these types of cassette tapes. You cannot obtain proper playback sound.

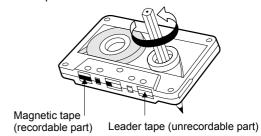
## Preventing recorded sound from being erased

- Write protect tags are attached to a cassette tape for preventing the erasing of recorded sound. They enable you to avoid losing important recordings because once you snap off the write protect tags, you cannot record to the cassette tape or erase recorded material.
- When you want to use the cassette tape for recording again, cover the tag holes with adhesive tape.



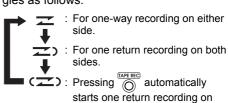
# Insert a cassette tape for record-

 Before inserting the cassette tape, wind the tape past the leader part of the cassette tape.



#### Press to select the reverse mode.

• Each time you press , the display toggles as follows.



both sides. You can change the reverse mode during recording.

## 3 Select a sound source for recording.

Sound source	Operation
Disc	Press , and then press . (The disc is stopped.)
Radio broadcast	Select the radio station whose broadcast you want to record (  page 19).
Sound from other equipment (AUX)	Press and prepare playback on the other equipment (  page 43).

## 4 Press $\bigcirc$ on the main unit.

Example: Display while CD sound is recorded



- When you record from a disc, all tracks are recorded to the cassette tape.
- When you want to record sound from other equipment, start playback on the connected equipment.
- When recording finishes, the color pattern of the display window and disc tray switches to the color pattern set in "MANUAL" to inform you that recording has finished ( page page 18).

## **Quitting Recording**

Press **■ .** 

# Recording Only One Track from a Disc

(Excluding DVD VIDEOs)

Before proceeding to step 4, play back the track you want to record.

 Pressing in step 4 returns playback to the beginning of the track and only that track is recorded.

## Recording the Second or Subsequent Track to the Last Track from a Disc

(For a DVD VIDEO: while the disc is paused)

■For a CD/VCD/SVCD/DVD VIDEO

Before proceeding to step 4, select the starting track/chapter number by

pressing PREVIOUS or PREVIOUS or PREVIOUS or PREVIOUS OF PREVIOUS

■For a DVD AUDIO/MP3/WMA

Before proceeding to step 4, select the group number by pressing or and then select the track number by pressing eprevious or expectation.

# Program Recording from a Disc

Before proceeding to step 4, program the tracks you want to record (

# Recording with No Blank Time between Tracks

Before proceeding to step 4, play back a disc, pause the playback, and then press for to return to the beginning of the first track.

# **Erasing Recorded Sound** from a Cassette Tape

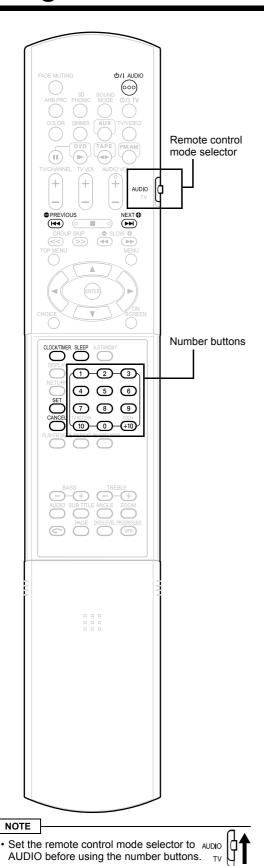
Select the sound from other equipment (AUX) in step 3, and then press

TAPE REC

 Do not play back any tracks on the connected equipment.

#### NOTE

• If the cassette tape reverses direction while a track is being recorded from a disc, this product starts recording that track again from the beginning onto the reverse side of the cassette tape. However, if 12 or less seconds of that track were recorded onto the first side of the cassette tape, recording to the reverse side of the cassette tape starts from the beginning of the previous track.



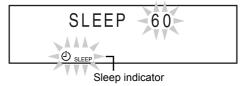
## **Sleep Timer**

When the specified time passes, the main unit automatically turns off.

# Press .

• Each time you press , the time display (in minutes) toggles as follows.

# Example: Display while the sleep timer is set to 60 minutes



### NOTE

- When you set the sleep timer, the display window automatically dims.
- Before the clock has been set (While "0:00" is flashing), when you press , "CLOCK ADJUST!" appears.

## Changing the sleep timer setting

- Press repeatedly to select the time again.
- Confirming the sleep timer setting (remaining time)
- With the sleep timer activated, press once.

## **Recording Timer**

You can use the recording timer function to record FM/AM broadcasts or sound from other equipment to cassette tape.

You can enter up to three timer settings in total for the recording timer and the playback timer (

### NOTE

 Timer settings remain unchanged until the timer is replaced by new setting.

## 1 Prepare the sound source.

Radio	Preset the radio station whose broadcast you want to record.  ( Far page 20)
Other equipment	Follow the operation manual for the equipment.

- 2 Insert a cassette tape. ( page 42)
- 3 Press repeatedly to select "TIMER1", "TIMER2" or "TIMER3".

Example: When "TIMER1" is selected



- 4 Press .
- Fress ♣PREVIOUS, NEXT OF OT OT to set the starting time and ending time.

Example:To set the recording time from 6:30 a.m. to 6:45 a.m.

- You can use the number buttons to set the recording time. Refer to "Using the number buttons" (
   page 16).
- For setting the clock, refer to "Setting the Clock" ( page 16).

Entering the "hour"  $\to \stackrel{\text{SET}}{\longleftrightarrow} \to$  Entering the "minute"  $\to \stackrel{\text{SET}}{\longleftrightarrow}$ 

6 Press ♣PREVIOUS or ♠PREVIOUS 
ONCE : The recording timer works

once

EVERYDAY: The recording timer works

every day.

- 7 Press .
- 8 Press PREVIOUS or TIMER" to select "REC
  - "REC" stands for "Recording".
- **9** Press <sup>SET</sup>.
- 10 Press PREVIOUS or PREVIOUS to select a sound source.

Example: To record an FM broadcast to a cassette tape



- When you want to record sound from other equipment, you cannot use the recording timer function to start playback on any equipment other than this product.
- ■When you want to record an FM/AM radio broadcast
  - Press , and then press , NEXT or the number buttons to select the preset number of the radio station whose broadcast you want to record. Refer to "Using the number buttons" (Press page 16).
- 11 Press .
  - The settings appear in the display window.
     Confirm the settings.
- 12 When the main unit is on, press

to turn off the main unit.

SEE YOU

- While the recording timer is functioning, the volume is set to "0" and no sound is produced from the speakers or headphones.
- The recording timer is available only when the main unit is turned off.

#### NOTE

 During operation, you can return to the previous step by pressing CANCEL. You can quit the recording timer settings by pressing COCKTIMER. The settings are not stored.

## Canceling the recording timer

In step 2 on page 47, select the timer number you want to cancel, and then press  $\overset{\text{CANCEL}}{\frown}$ .

Even when you cancel the recording timer, the setting remains stored.

## Activating the recording timer again

In step 2 on page 47, select the timer number you want to activate, and then press repeatedly until all of the setting procedure finishes. Then turn off the main unit.

#### NOTE

- When you want to activate two or three recording timers, leave a blank time of 2 or more minutes between the ending time of the first recording timer and the starting time of the second recording timer. If the blank time is less than 2 minutes, the second recording timer does not work.
- When the power plug is disconnected or the power is cut, the recording timer settings may be lost. If the settings are lost, set the clock and recording timer again.

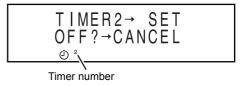
## **Playback Timer**

# 1 Prepare the sound source you want to play back.

Disc	Make sure that a disc is loaded. (  (
Cassette tape	Insert a cassette tape. ( F page 42)
Radio	Preset the radio station whose broadcast you want to listen to. ( page 20)
Other equipment	Follow the operation manual for the equipment.

# 2 Press repeatedly to select "TIMER1", "TIMER2" or "TIMER3".

Example: When "TIMER2" is selected



- 3 Press .
- 4 Press PREVIOUS, NEXT OF OT to set the starting time and ending time.

Example: When you want to set the playback time from 7:00 a.m. to 7:30 a.m.

- You can use the number buttons to set the playback time. Refer to "Using the number buttons" (Propage 16).
- For setting the clock, refer to "Setting the Clock" (P page 16).

Entering the "hour"  $\to \stackrel{\mathbb{SET}}{\longrightarrow} \to$  Entering the "minute"  $\to \stackrel{\mathbb{SET}}{\bigcirc}$ 

Press ♣PREVIOUS or ♠PREVIOUS o

ONCE : The playback timer works once. EVERYDAY : The playback timer works every day.

6 Press .

7 Press ♣PREVIOUS or ♠PREVIOUS or ♠PREVIOUS to select "PLAY TIMER".

(Continued on next page)

8 Press .

9 Press PREVIOUS or to select the sound source you want to play back.

Example: When you want to listen to an AM broadcast



- When you want to listen to sound from other equipment, you cannot use the playback timer function to start playback on any equipment other than this product.
- You cannot use the playback timer function together with program playback, repeat playback or random playback of a disc.
- When you want to listen to an FM/AM radio broadcast
  - (With "FM" or "AM" selected) Press , and then press , previous or the number buttons to select the preset number of the radio station whose broadcast you want to listen to ( page 20). Refer to "Using the number buttons" ( page 16).
- ■When you want to play back a DVD VIDEO or DVD AUDIO
  - (With "DVD/CD" selected) Press twice. Regardless of the displayed numbers of group (G) and track (T), you can play back a DVD VIDEO or DVD AUDIO only from the beginning of the disc.
- ■When you want to play back a CD, VCD or SVCD
  - (With "DVD/CD" selected) Press twice, and then press perevous, Next of or the number buttons to select the number of a track (T) from which you want to start playback. Refer to "Using the number buttons" (Refer to "Using the number buttons" (Refer to "Ising the number buttons" (Refer to "Ising the number buttons" (Refer to "Ising the number buttons") is ignored.
- ■When you want to specify a track from which you want to start playback on an MP3 or WMA
  - (With "DVD/CD" selected) Press , press PREVIOUS, NEXT® or the number buttons to select the group number (G) to be played back, press , and then press previous, NEXT® or the number buttons to select the track number (T) to be played back. Refer to "Using the number buttons" (Refer to "Using the number buttons" (Refer to "Day 2016).

- 10 Press  $\stackrel{\text{\tiny SET}}{\bigcirc}$ .
- 11 Press PREVIOUS or PREVIOUS to adjust the playback volume.
- - The settings appear in the display window.
- 13 When the main unit is turned on,

press oo to turn off the main unit.

SEE	YOU
<u></u> و 2	

 The playback timer is available only when the main unit is turned off.

#### NOTE

- During operation, you can return to the previous step by pressing CANCEL. You can quit the playback timer settings by pressing COCKTIMER. The settings are not stored.
- When the playback timer starts, the volume gradually increases to the selected level.

# Canceling the playback timer function

In step 2 on page 48, select the timer number you want to cancel, and then press .

Even when you cancel the playback timer, the setting remains stored.

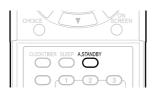
## Activating the playback timer again

In step 2 on page 48, select the timer number you want to activate, and then press repeatedly until all of the setting procedure finishes. Then turn off the main unit.

#### NOTE

- When you want to activate two or three playback timers, leave a blank time of 2 or more minutes between the ending time of the first playback timer and the starting time of the second playback timer. If the blank time is less than 2 minutes, the second playback timer does not work.
- When the power plug is disconnected or the power is cut, the playback timer settings may be lost. If the settings are lost, set the clock and playback timer again.
- When you operate the playback timer with a DVD VIDEO, DVD AUDIO or VCD, sound and video may not be played back automatically. A DVD VIDEO, DVD AUDIO or VCD may contain a disc menu that appears first when played back. Sound or video will not come out before you select the desired item to be played back on the disc menu.

# **Auto Standby**

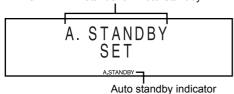


If no sound is produced for 3 minutes when the disc or cassette tape is selected as a sound source, the main unit automatically turns off.

■When the disc or cassette tape is selected as a sound source

Press ASTANDBY.

"A. STANDBY" stands for "Auto Standby".



## Auto standby performance

When playback or recording finishes, auto standby starts the countdown (the "A. STANDBY" indicator flashes). When no operation is carried out within 3 minutes, the main unit automatically turns off. When you start playback or recording within 3 minutes, auto standby starts the countdown again after playback or recording finishes.

When an operation other than playback and recording finishes and no operation is carried out within 3 minutes, the main unit automatically turns off.

"A. STANDBY OFF" indicator starts to flash 20 seconds before the main unit is to turn off.

## Canceling auto standby

Press once again.

A. STANDBY CANCEL

#### NOTE

Leaving the volume at "0" is not the same as producing no sound, and therefore does not start the auto standby function.

## **Disc Ejection Lock**



You can prohibit ejection of a disc.

■When the main unit is turned off

While holding down o, press on the main unit.



Even if you press , "LOCKED" appears in the display window and the disc does not come out. In addition, when you press , while the main unit is turned off, "LOCKED" appears in the display window and the main unit does not turn on.

## Canceling the disc ejection lock

■When the main unit is turned off Carry out the operation explained above once again.

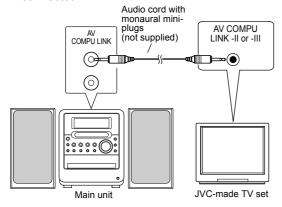
UNLOCKED

## Using AV COMPU LINK

The JVC AV COMPU LINK system allows you to enjoy video or audio with the simplest operation. If your JVC TV set supports the JVC AV COMPU LINK system, simply starting the main unit will automatically make all necessary settings on the TV to allow you to enjoy the playback.

## **Connection and Setting**

 Carefully read manuals of equipment to be connected.



Set the main unit's AV COMPU LINK MODE setting ( Reg page 39) as follows.

- When connecting to the VIDEO-1 input terminal of the TV: DVD 2
- When connecting to the VIDEO-2 input terminal of the TV: DVD 3
- When connecting to the VIDEO-3 input terminal of the TV: DVD 1

## **Operations**

You can enjoy sound or video simply by starting playback on the main unit. You do not have to select the input setting for the TV, or turn on the TV beforehand.

- 1 Turn on the main power to the TV.
- 2 Insert a disc into the main unit.
- 3 Press on the main unit.

The following operation is performed automatically.

- The TV set will be turned on.
- TV input will be switched to external input (Video 1, 2 or 3) of the main unit.

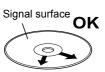
When you turn off the main unit, power to the TV is not turned off.

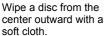
# **Handling Discs/Cassette Tapes**

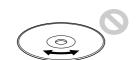
## Handling discs

- Do not put adhesive tape or stickers, or write on a disc
- · Do not bend a disc.
- Be sure not to use heart/flower shaped discs or other irregularly shaped discs. The use of such discs damages the main unit.

## Cleaning discs







Scratches concentrated on a certain part cause sound dropout.

 Be sure not to use thinners, benzenes, cleaners for analog records, or other chemical agents.

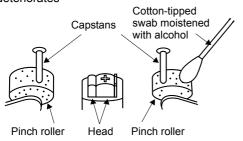
## Handling cassette tapes

• A slack tape may become caught in the inner part of the main unit and damage the main unit.

Before using a cassette tape, wind up any slack in the cassette tape as shown on the right. Do not pull out the tape or touch the tape's surface.

## Cleaning the tape deck head

 Clean the head, pinch rollers and capstans approximately every 10 hours of playback time before the volume falls or sound quality deteriorates



## Cleaning the main unit cabinet

- Gently dust the cabinet surface with a soft dry cloth. When the cabinet is very dirty, dampen the cloth with a neutral detergent diluted with water, wring out the cloth well, and then wipe the cabinet with the dampened cloth followed by a soft dry cloth.
- Do not wipe the cabinet with thinners or benzenes. Wiping it with these agents may cause discoloration of the cabinet or removal of the paint. Do not spray insecticides or other highly volatile agents onto the cabinet. Do not leave pieces of rubber or plastic on the cabinet for a long period.

# **Disc Messages**

Disc message	Meaning	Possible solution
CANNOT PLAY	You are trying to play back an unplayable disc or a disc that has many scratches.	Replace the disc.
NO DISC	No disc is loaded.	-
NO AUDIO	The disc may be an illegally copied disc.	You cannot listen to the disc.
LR ONLY	You are playing back a multi-channel track for which down-mix is prohibited.	This is normal operation.

# **Troubleshooting**

Problem	Possible cause	Possible solution	Reference page
No sound/video is	Improper connection.	Connect all cords properly.	11-15
produced.	Headphones are connected.	Disconnect the headphone plug.	8
The clock display is flashing.	A power failure occured or the power plug was disconnected.	Reset the clock.	16
Diag alambad, daga ast	The disc is upside down.	Place the disc on the disc tray with the letter-printed surface facing up.	21
Disc playback does not start.	Moisture has condensed on the lens.	Leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.	3
A certain point cannot be played back properly.	The disc is scratched or dirty.	Clean or replace the disc.	52
The volume of cassette tape playback is low.	The head or capstans are dirty.	Clean the head or capstans.	52
You cannot record a cassette tape.	The cassette tape is write-protected.	Cancel the write-protection.	44
A radio broadcast cannot be received.	No antenna is connected.	Connect an antenna.	11, 12
A whirring noise is produced.	The main unit is located close to a TV, computer, or other electric appliance.	Place the main unit away from a TV, computer, or other electric appliance.	3
You cannot set the timer.	You did not set the clock.	Set the clock.	16
The timer does not work.	The main unit is turned on.	After setting the timer, turn off the main unit.	47, 49
You cannot operate the remote control.	The remote control batteries are running low.	Replace the batteries with new batteries.	9
You cannot operate the main unit with the number buttons on the remote control.	The remote control mode selector on the remote control is set to TV.	Set the remote control mode selector to AUDIO.	16
When you turn on the main unit, a noise comes out from the rear of the main unit.	The internal cooling fan produces the noise as it rotates.	The noise is not a malfunction. This is to prevent excessive heat.	13, 17

### If this product does not function properly even after you have implemented the possible solutions given above

Many functions of this product are implemented by microcomputers. If malfunction is caused by thunder or static electricity, or the main unit does not function properly even when you press a button, disconnect the power plug from the AC outlet, wait for a while, and then connect this product again. Then reset the clock.

# **Specifications**

## ■DVD receiver (CA-UXQD9S)

### **Amplifier**

Output power 20 W + 20 W at 4  $\Omega$ 

(10% THD)

Input terminals

<Analog> AUX×1,

500 mV/47 kΩ:LEVEL1

250 mV/47 kΩ:LEVEL2

Output terminals

<Analog> Speaker×1, 20 W/4  $\Omega$ 

Impedance 4  $\Omega$  - 16  $\Omega$ 

Headphone (×1), 25 mW/32  $\Omega$ 

Impedance 16  $\Omega$  - 1 k $\Omega$ 

<Digital> DVD/CD optical input × 1

-23 dBm to -15 dBm (Optical square terminal)

<Other> AV COMPU LINK × 2 (\$\phi\$ 3.5)

Tuner

Frequency FM:87.50 MHz - 108.00 MHz

AM:531 kHz - 1 710 kHz (9 kHz spacing) 530 kHz - 1 710 kHz (10 kHz spacing)

DVD player

Playable discs DVD VIDEO, DVD AUDIO,

CD, VCD, SVCD, CD-R/CD-RW (CD, VCD, SVCD, MP3/ WMA/JPEG format), DVD-R/ DVD-RW (video format)

#### Cassette deck

Frequency response

Normal (type I) 60 Hz - 14 000 Hz Wow and flutter 0.15% (WRMS)

#### General

Power requirement AC 240 V $\sim$ , 50 Hz Power consumption 70 W (at operation)

1.3 W (on standby)

Dimensions 165 mm (W) × 200 mm (H)

× 355 mm (D)

Mass (approx.) 4.6 kg

## ■Speaker (SP-UXQD9S)

System 3-way bass reflex type,

Magnetically shielded type

Speakers Woofer: 10 cm × 1

Midrange: 4 cm × 1 Tweeter: 1.5 cm × 1

Power handling 20 W capacity

Impedance 4 Ω

Frequency range 55 Hz - 40 kHz

Sound pressure 85 dB/W·m

level

Dimensions 140 mm (W) × 231 mm (H)

× 204.5 mm (D)

Mass (approx.) 2.2 kg (1 unit)

## Micro component system (UX-QD9S)

#### General

Dimensions 445 mm (W) × 231 mm (H) × 355 mm (D)

Mass (approx.) 9.0 kg

 U.S. and foreign patents licensed from Dolby Laboratories.



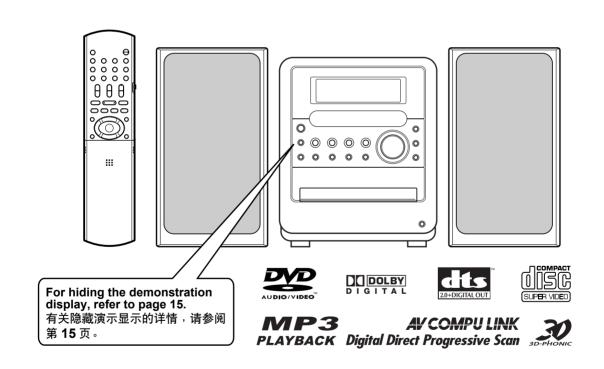


## MICRO COMPONENT SYSTEM

微型组合音响

# **UX-QD9S**

Consists of CA-UXQD9S and SP-UXQD9S 由 CA-UXQD9S 和 SP-UXQD9S 组成





# Warnings, Cautions and Others / 警告,注意及其他须知事项

#### CAUTION

To reduce the risk of electrical shocks, fire, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

#### 注意

为了减少触电、火灾等危险:

- 1. 请勿擅自卸下螺丝钉、盖子或机壳。
- 2. 请勿让本机受雨淋或置于潮湿环境中。

#### CAUTION — O/I button!

Disconnect the mains plug to shut the power off completely

The O/I button in any position does not disconnect the

The power can be remote controlled.

#### 注意 - ひ/ 开关!

想要完全关闭电源,须将电源插头从插座上拔下。 无论 🔰 键处于何种位置, 主电路仍旧没有关闭。 电源开关可用遥控器进行控制。

#### CAUTION

- · Do not block the ventilation openings or holes. (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

#### 注意

- 切勿堵塞通风口或通风孔。 (如果通风口或通风孔被报纸或布等物堵塞,热量将无
- 切勿在本系统上放置明火,如点燃的蜡烛。
- 想要丢弃电池时, 务必考虑环保问题以及严格遵守当地 关于处理废旧电池相关的法律规定和条例。
- 切勿让本机受雨淋、受潮湿、落上或溅上水滴,亦勿在 本机上面放置盛满液体的容器, 如花瓶。

## IMPORTANT FOR LASER PRODUCTS / 镭射产品的重要说明

- 1. CLASS 1 LASER PRODUCT
- 2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
- 3. CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED INSIDE THE UNIT.

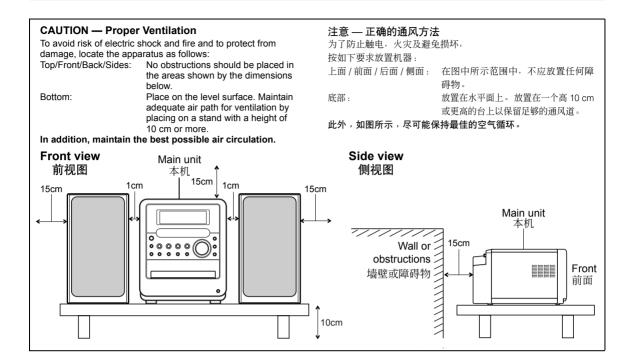
- 1. 一级镭射产品。
- 2. 注意:请勿打开顶盖板,本机内部没有用户可自行维修 的部件; 所有维修工作应由有资格的人员完成。
- 3. 注意: 当内部锁定装置失效或者损坏后, 打开盖板可能 会产生可见或不可见的镭射辐射。 应避免受到镭射光 束的直接照射。
- 4. 标签的复制标示: 注意标签位于机内。

laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

**CAUTION**: Visible and invisible **ADVARSEL**: Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til urkopplad. stråling

VARNING: Synlig och osynlig laserstrålning när den öppnas och spärren är Betrakta e strålen. (s)

VARO: Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)



# **Table of Contents**

Used frequently marks refer to operation used frequently. You can quickly learn the general usage of this product by reading those parts only.

Introduction	Listening to Radio Broadcasts
Notes on Operation         3           Suitable Locations for the Main Unit         3           Condensation         3           Cleaning the Main Unit         3           Listener's Etiquette         3           Playable Disc Types         4           Disc Structure         5           Selecting the Color System         6           Special Cautions         7           Notes on Handling         7           Supplied Accessories         7	Listening to Radio Broadcasts  Setting the AM Tuner Spacing
Supplied Accessories	Playback
Preparation	Playing Back from a Position 10 Seconds Before (One Touch Replay)23
Part Description	Stopping Playback
Basic Operations	Selecting the AudioUsed frequently 26
Basic Operations	Selecting the Subtitle

52
53
53
54

# **Notes on Operation**

# Suitable Locations for the Main Unit

To minimize the need for servicing and maintain the high quality of this product, do not place the main unit in the following locations:

- In a position subject to high humidity or considerable dust
- · On an uneven or unstable surface
- · Near a heat source
- Near a computer, fluorescent light or other electric appliance
- In a small room with insufficient ventilation
- In a position exposed to direct sunlight
- · In a position exposed to excessive cold
- In a position exposed to strong vibration
- · Near a TV, other amplifier, or tuner
- · Near a magnetic source

#### CAUTION

 The operating temperature of this product is 5°C to 35°C. Use in temperatures outside this range may cause a malfunction or damage the product.

### Condensation

Under the following conditions, you may not be able to operate this product properly due to condensation formed on the lens of the main unit:

- When you have just started an air conditioner to warm your room
- When you have placed the main unit at an area with high humidity
- When you have moved the main unit from a cold place to a warm place

When condensation forms, leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.

## **Cleaning the Main Unit**

When the operation panel becomes dirty, dust it with a soft dry cloth. When the operation panel is very dirty, wipe it with a cloth dampened with a small amount of a neutral detergent, and then wipe it with a soft dry cloth.

#### CAUTION

 Do not wipe the operation panel with thinners, benzenes or other chemical agents. Do not spray insecticides onto the operation panel. These may cause discoloration and damage to the surface.

## **Listener's Etiquette**

When using headphones, keep the volume at a moderate level so as not to over-stimulate your ears.

■When enjoying sound from the speakers, adjust the volume to a suitable level to avoid disturbing your neighbors.

Even low-volume sound carries a long way, especially at night. Show consideration to your neighbors by closing windows or using headphones.

Manufactured under license from Dolby Laboratories. "Dolby", "MLP Lossless", and the double-D symbol are trademarks of Dolby Laboratories.

<sup>• &</sup>quot;DTS" and "DTS 2.0+DIGITAL OUT" are registered trademarks of Digital Theater Systems, Inc.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents
and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright
protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited
viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is
prohibited.

## **Playable Disc Types**

This product has been designed to play back the following discs:

DVD VIDEO, DVD AUDIO, VCD, SVCD, CD This product can also play back the following discs:

- Finalized DVD-R/RW discs recorded in the DVD VIDEO format.
- CD-R/RW discs recorded in the following formats
- Music CDs (finalized discs)
- VCDs
- SVCDs
- MP3/WMA/JPEG discs recorded in ISO 9660 (for details, refer to "About MP3/WMA/JPEG discs") However, some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them. Only sounds can be played back from the following discs:

MIX-MODE CD CD-EXTRA CD-G CD TEXT

#### Discs you can play:

	2.000 you ou p.u.y.			
Disc Type	Mark (Logo)	Video Format	Region Code Number*	
DVD VIDEO	VIDEO TM VIDEO	PAL/ NTSC	3/ALL	
DVD AUDIO	AUDIO/VIDEO AUDIO	1	1	
VCD	COMPACT VIDEO CD	PAL/ NTSC	1	
SVCD	COMPACT VIDEO VIDEO CD	PAL/ NTSC	-	
CD	COMPACT DIGITAL AUDIO	ı	1	
CD-R	COMPACT DIGITAL AUDIO Recordable		1	
CD-RW	COMPACT DIGITAL AUDIO REWITABLE	_	_	

DVD Logo is a trademark of DVD Format/Logo Licensing Corporation.

\* Note on Region Code

DVD players and DVD VIDEOs have their own region code numbers. This product can only play back a DVD VIDEO recorded with the region code number and video format mentioned above.

#### **Examples:**









If a DVD VIDEO with an improper region code number is loaded, "REGION CODE ERROR!" appears on the TV screen and playback cannot start.

 On some DVD VIDEOs, DVD AUDIOs, VCDs or SVCDs, their actual operation may be different from what is explained in this manual. This is due to the disc programming and disc structure, not a malfunction of this product.

#### About CD-Rs/CD-RWs

You can play back a CD-R/CD-RW only when the disc is finalized.

- You can play back a CD-R/CD-RW which has been recorded in the audio CD format and a CD-R/CD-RW to which audio data (MP3/WMA) or a still picture data (JPEG) file is recorded.
- However, playback is impossible in some cases due to the disc characteristics, recording condition, scratches or dirt on the disc, or dirt or condensation on the lens
- Before using a CD-R/CD-RW, carefully read the cautions regarding the disc.
- This product does not support playback or CD text display of sound files such as MP3s
- To play back a CD-RW on this product, erase all tracks if the CD-RW was recorded in a format other than the audio CD format. Using the CD-RW without erasing all tracks may result in damage to the speakers or other parts caused by sudden loud volume.

### Discs that cannot be played back

- The following discs cannot be played back: DVD-ROM, DVD-RAM, DVD-RW (recorded in VR format), CD-ROM, CD-I (CD-I Ready), Photo CD, SACD, etc.
- Playing back these discs will generate noise and damage the speakers.
- Damaged discs and discs in an extraordinary shape (other than a disc of 12 cm or 8 cm in diameter) cannot be played back.
- JVC do not guarantee the operation and sound quality of discs not authorized by CD-DA, which is a CD specification.

Before playback, confirm that the disc complies with this CD specification by checking the marks and reading notes printed on the package.

#### About MP3/WMA/JPEG discs

Playable MP3/WMA/JPEG discs and files

- Discs recorded in the ISO 9660 format are playable (except discs recorded in the "packet write" format (UDF format)).
- Discs recorded in the multi-session format are also playable.
- Files with an extension of ".mp3", ".wma", ".jpg" or ".jpeg" (extensions with uppercase and lowercase letters mixed are also acceptable) are playable.

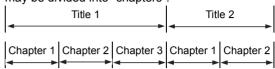
#### Notes on MP3/WMA/JPEG discs and files

- A disc may not be played back, or reading it may take a long time depending on its recording conditions or properties.
- The time needed for reading varies with the number of groups or tracks (files) recorded on the disc.
- If a character other than single byte English characters is used in the file name of an MP3/ WMA/JPEG file, the track/file name will not be displayed correctly.
- The order of tracks/groups displayed on the MP3/WMA Control screen, and the order of files/ groups displayed on the JPEG Control screen may be different from that of files/folders displayed on PC's monitor screen.
- In the case of MP3/WMA discs, since groups/ tracks are played back in alphabetical order, an off-the-shelf MP3/WMA disc may be played back in an order different from that indicated on the label attached to the disc.
- Playing back an MP3/WMA file including a still image may take a long time. The elapsed time is not displayed until playing back starts. If playing back starts, the elapsed time may not be displayed correctly.
- For an MP3/WMA file, a disc with a sampling frequency of 44.1 kHz and transmission rate of 128 kbps is recommended.
- This product is not compatible with MP3i or MP3PRO.
- This product can play back a baseline JPEG file, excluding monochromatic JPEG files.
- This product can play back JPEG data taken with a digital camera conforming to the DCF (Design Rule for Camera File System) standard (when a function is applied such as the automatic rotation function of a digital camera, data goes beyond the DCF standard, so the image may not be displayed).
- If data has been processed, edited and restored with PC image editing software, the data may not be displayed.
- This product cannot play back animations such as MOTION JPEG, or still pictures (TIFF etc.) other than JPEG, and image data with sound.
- The resolution of 640 x 480 pixels is recommended for JPEG files. If a file has been recorded at a resolution of more than 640 x 480 pixels, display may take a long time. An image with a resolution of more than 8 192 x 7 680 pixels cannot be displayed.
- Files recorded on DVD-R/RW discs cannot be played back.

## **Disc Structure**

#### **DVD VIDEO**

A DVD VIDEO consists of "titles" and each title may be divided into "chapters".



#### **DVD AUDIO**

A DVD AUDIO consists of "groups" and each group may be divided into "tracks". Some discs include a "bonus group" that requires

a password for playing ( page 30).



#### VCD/SVCD/CD

VCD, SVCD and CD consist of "tracks".

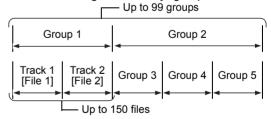
In general, each track has its own track number. (On some discs, each track may also be further divided by indexes.)



### MP3/WMA [JPEG] discs

On an MP3/WMA [JPEG] disc, each still picture (material) is recorded as a track [file]. Tracks [Files] are usually grouped into a folder. Folders can also include other folders, creating hierarchical folder layers.

This unit simplifies the hierarchical construction of a disc and manages folders by "groups".



This product can recognize up to 1 000 tracks [files] in a disc. Also, the product can recognize up to 150 tracks [files] per group and up to 99 groups in a disc. Since the unit ignores the tracks [files] whose numbers are exceeding 150 and the groups whose numbers are exceeding 99, they cannot be played back.

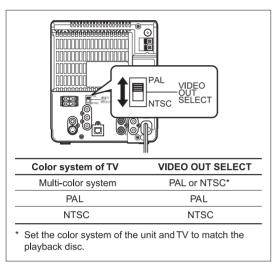
 If there is any type of files other than MP3/WMA [JPEG] files in a disc, those tracks [files] are also counted in the total file number.

## **Selecting the Color System**

This product is compatible with PAL and NTSC color systems.

In standby mode, select PAL or NTSC to match vour TV.

If the VIDEO OUT SELECT switch is switched over when the power is on, turn off the power, and then turn it on again.



 Before playing back a disc, it is also required to select the correct MONITOR TYPE in the PICTURE menu according to the aspect ratio of your TV (Propage 38).

### NOTE

 If you play back an NTSC disc with this setting set to "PAL", you can watch the playback pictures (the disc will be reproduced using "PAL 60" format), but the TV screen may rolls over upward and downward rapidly.

#### NOTE

- If you play back a PAL disc with this setting set to "NTSC", you can watch the playback pictures, but the following symptoms may occur:
- The items on the disc menu will be blurred, and be shown slightly shifted when highlighted.
- The aspect ratio of the picture may differ from the original aspect ratio.
- The picture movement is not smooth.

# **Special Cautions**

## **Notes on Handling**

#### ■Important cautions

#### Installation of the system

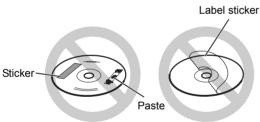
- Select a place which is level, dry and neither too hot nor too cold; between 5°C and 35°C.
- Leave sufficient distance between the system and the TV.
- Do not use the system in a place subject to vibration.

#### Power cord

- Do not handle the power cord with wet hands!
- A small amount of power is always consumed while the power cord is connected to the wall outlet.
- When unplugging the power cord from the wall outlet, always pull on the plug, not the power cord.

#### To prevent malfunctions of the system

- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the system.
- Do not use any non-standard shape disc (like a heart, flower or credit card, etc.) available on the market, because it may damage the system.
- Do not use a disc with tape, stickers, or paste on it, because it may damage the system.



#### Note about copyright laws

Check the copyright laws in your country before recording from CDs. Recording of copyrighted material may infringe copyright laws.

■Safety precautions

### Avoid moisture, water and dust

Do not place the system in moist or dusty places.

#### Avoid high temperatures

Do not expose the system to direct sunlight and do not place it near a heating equipment.

#### When you are away

When away on travel or for other reasons for an extended period of time, disconnect the power cord plug from the wall outlet.

#### Do not block the vents

Blocking the vents may damage the system.

#### Care of the cabinet

When cleaning the system, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents including disinfectants. These may cause deformation or discoloring.

#### If water gets inside the system

Turn the system off and disconnect the power cord plug from the wall outlet, then call the store where you made your purchase. Using the system in this condition may cause fire or electrical shock.

■When condensation or water drops adhere to the lens

In any of the following cases, condensation or water drops may adhere to the lens to prevent the system from working properly:

- · Immediately after roomheating starts
- When the system is installed in a steamy or damp space
- When the system is suddenly moved from a cold place to a warm space

In any of these cases, leave the system turned on for 1 or 2 hours before use.

## **Supplied Accessories**

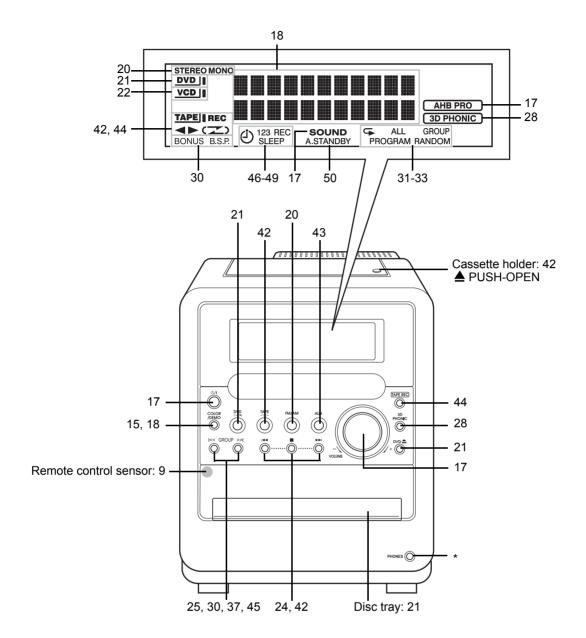
Check to be sure you have all of the supplied accessories.

The number in parentheses is the quantity of the pieces supplied. If anything is missing, contact your dealer immediately.

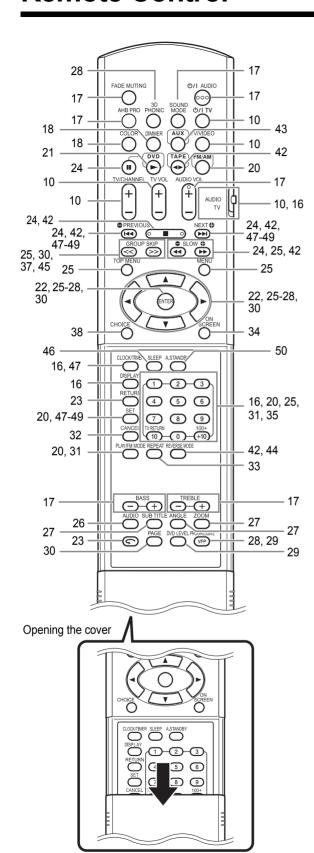
Remote control (1) Batteries (2) FM antenna (1) AM loop antenna (1) Video cord (1) AC plug adaptor (1)

<sup>•</sup> This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

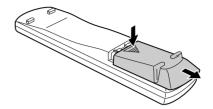
English

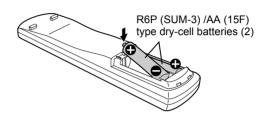


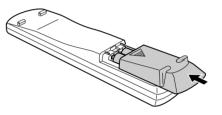
<sup>\*</sup> This terminal is for connecting a pair of headphones equipped with a stereo mini plug (not supplied). While the headphones are connected, the speakers do not produce any sound.



# **Inserting Batteries into the Remote Control**







## CAUTION

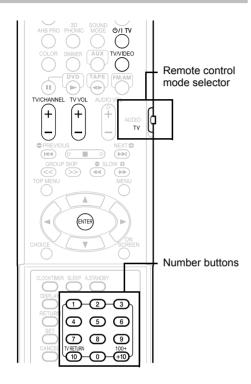
- Do not use a used battery and a new battery together.
- Do not use different types of batteries at the same time.
- Take out the batteries if the remote control is not to be used for a long time. Otherwise it may cause a leakage.

## Remote control operation

- When operating the remote control, point it at the front panel of the main unit.
- The effective distance between the remote control and the remote control sensor on the main unit is approximately 5 m maximum.
- When the effective distance decreases, replace the batteries.
- Do not drop the remote control or subject it to excessive shock.

This page is for when operating your TV using the remote control of this product.

# Operating the TV Using the Remote Control



## Setting the manufacturer's code

1 Slide the remote control mode selector to the TV side.



**2** Hold down ⊖ .

Hold down O

• Hold down  $\bigcap^{0/l \text{ TV}}$  until step 4 is completed.

3 Press end release.

## 4 Press number buttons (1-9, 0).

### **Examples:**

For a Hitachi TV: Press 1, then 0. For a Toshiba TV: Press 0, then 8. If there are two or more manufacturer's codes, try them in turn and select the one that causes the product to work properly.

Manufacturer	Code	Manufacturer	Code
JVC	01	Samsung	12
Hitachi	10	Sanyo	13
Magnavox	02	Sharp	06
Mitsubishi	03	Sony	07
Panasonic	04, 11	Toshiba	08
Philips	14	Zenith	09
RCA	05		

# **5** Release $\bigcirc^{0/1 \text{ TV}}$ .

### NOTE

 The manufacturer's codes may be changed without notice. You may not be able to operate a TV produced by the manufacturer shown above.

## For TV operation

Operate the remote control by pointing it towards the TV.

Ф/I TV	Turn on/off the power.		
TV/CHANNEL +	Change channels.		
TV VOL +	Adjust volume.		
1 - 9 / 0 / +10	AUDIO TV 41	Select channels.	
TV RETURN	Change between the previously selected channel and the current channel.		
TV/VIDEO	Change between TV and video input.		

<sup>\*1</sup> Make sure to slide the remote control mode selector to the TV side in advance.

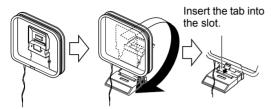
#### NOTE

 When the batteries are replaced, perform the manufacturer's code setting again.

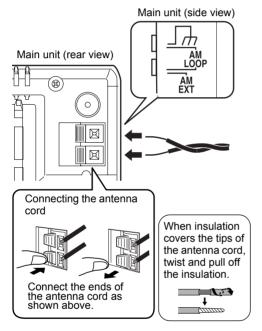
## **Connecting the Antennas**

## Connecting the AM antenna

1 Set up the AM antenna (supplied).



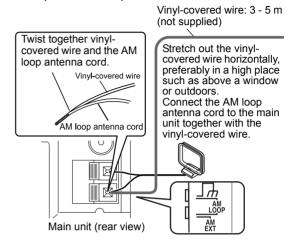
2 Connect the antenna cord.



3 Turn the AM loop antenna to find the best position for radio reception.
Place the AM loop antenna as far

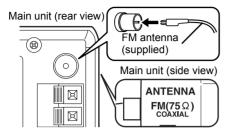
Place the AM loop antenna as far from the main unit as possible.

 Do not place the AM loop antenna on a metallic table or close to a TV, computer, or other electric appliances. Doing so may affect radio reception. ■When radio reception with the supplied AM loop antenna is poor

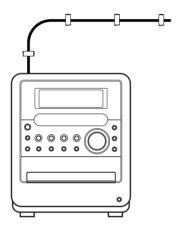


When positioning the antennas, find the best position for reception while listening to an actual radio program (refer to "Listening to Radio Broadcasts" ( page 19)).

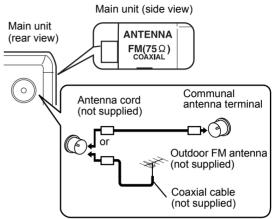
# Connecting the FM antenna



Stretch out the FM antenna to the best position for radio reception, and then fix it with adhesive tape.



When radio reception with the supplied FM antenna is poor, or when using a communal antenna

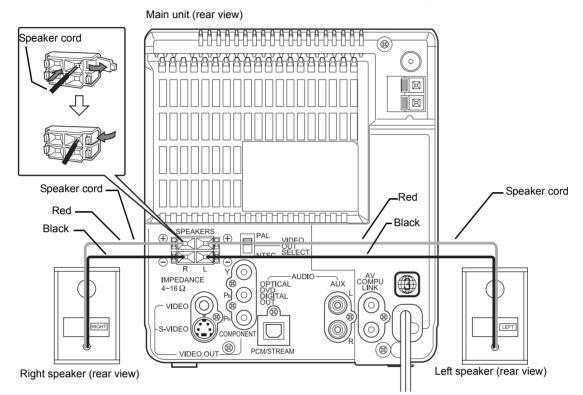


When using an antenna other than those supplied with this product, refer to the operation manuals for the antenna for details of connection.

When positioning the antennas, find the best position for reception while listening to an actual radio program (refer to "Listening to Radio Broadcasts" ( page 19)).

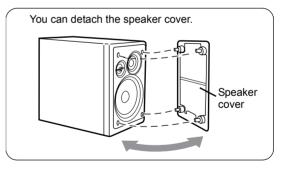
## **Connecting the Speakers**

After connecting the speakers, gently pull on the speaker cords to make sure the cords are firmly connected and do not pull out.



#### CAUTION

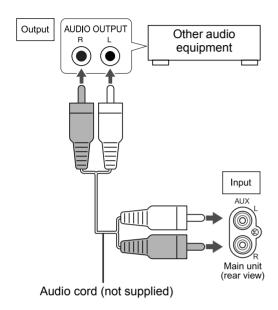
- Do not short-circuit the ⊕ and ⊖ speaker terminals. Doing so may damage the speakers.
- Do not connect other speakers together with the supplied speakers. The change in impedance may damage the main unit and the speakers.
- The speakers of this product are magnetically shielded, but color irregularities may occur on the TV depending on how the speakers are installed. Keep in mind the following.
  - Turn off the main power of your TV before installing the speakers. Wait for about 30 minutes before turning on the TV again.
- If color irregularity occurs in pictures, keep a distance of more than 10 cm between the TV and the speakers.



- Improper speaker cord connection spoils the stereo effect and sound quality.
- The impedance of speakers connected to this product must be within the range of 4  $\Omega$  to 16  $\Omega$
- Cooling fan is built into the main unit for emitting generated heat. When you turn on the main unit, the internal cooling fan automatically starts rotating. To ensure sufficient cooling, leave a space of more than 1 cm between the main unit and the speakers or other objects.

## **Connecting Other Equipment**

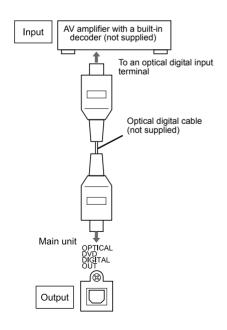
Read this section when connecting other audio equipment to this product.



#### CAUTION

• Before connecting other equipment, turn off both the main unit and the equipment.

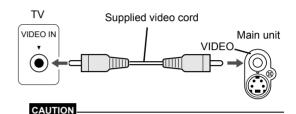
# Connecting with digital equipment



#### CAUTION

- · For details of signals to be output, refer to page 39.
- If connecting the main unit to equipment that has
  the function of a Dolby Digital decoder, the setting in "D. RANGE COMPRESSION" of "AUDIO"
  ( page 39) will be invalid regarding sound
  from the digital audio output of the main unit.

## Connecting with a TV



 Connect the main unit directly with a TV (or a monitor) without routing through a VCR. Otherwise it may cause picture distortion while playing back. (Such picture distortion is caused by a copy protection system, and thus it is not a malfunction.)



Also, if the main unit is connected to a TV with a built-in VCR, there may be picture distortion during playback.

#### NOTE

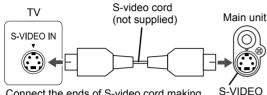
 Please check that the setting for VIDEO OUT SELECT (PAL/NTSC) on the rear panel of the main unit and the color system on your TV set are the same. (I) page 6)

You need to set "MONITOR TYPE" in the "PICTURE" menu correctly according to the aspect ratio of your TV. (L page 38)

# When a Clearer Picture Is Desired

You can enjoy pictures of better quality using the following cord instead of the supplied video cord.

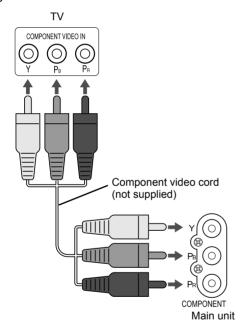
## Connecting by using the S-video cord



Connect the ends of S-video cord making sure that each end matches its compatible terminal.

# Connecting by using the component video cord

You can enjoy better quality pictures than when using the S-video cord.



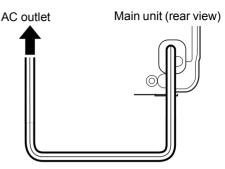
#### CAUTION

 Use one of either the S-video cord or the component video cord. If both cords are used, pictures may not be played back properly.

#### NOTE

- In order to enjoy pictures with the progressive mode ( page 29), the TV is required to have progressive video input.
- If the component video input jacks of your TV are BNC type, use a plug adapter (not supplied) to convert the plugs.

## **Connecting the Power Plug**



 After making all other necessary connections, connect in the power plug.

#### NOTE

- The preset setting such as preset channels and sound adjustment may be erased in a few days in the following cases:
  - When you disconnect the power plug.
- When a power failure occurs.

## Demonstration display function

When you connect the power plug into the AC outlet, "DEMO START!" appears in the display window and the demonstration display starts.

When you press on the main unit, "DEMO OFF" appears in the display window and the demonstration display is canceled.

Turning on the main unit automatically cancels the demonstration display.

#### Resuming the demonstration display

With the power turned off, press on the main unit.

#### Hiding the demonstration display

With the power turned off, hold down

until "DEMO CLEAR" appears.

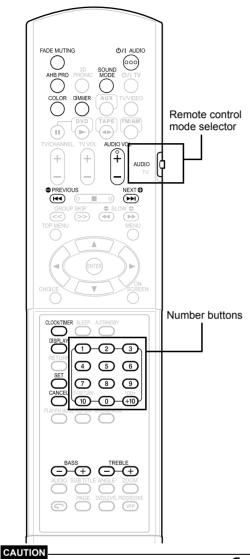
Disconnecting and then reconnecting the power plug does not start the demonstration display.

To activate the demonstration display again,

hold down intil "DEMO START!" appears.

# **Basic Operations**

This manual explains the operations assuming that vou will use the remote control. Some buttons on the main unit are the same as those on the remote control. You can use either button in this case.



 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



## **Setting the Clock**

You can set the clock while the main unit is turned either on or off.

Example: To set the clock to 10:10 a.m.

Press CLOCK/TIMER



#### Set the hour.

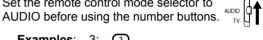
●PREVIOUS NEXT ◆ (FF) ✠ Back Next

- · Holding down the button causes the hour to
- You can use the number buttons to specify the hour.

Refer to "Using the number buttons" shown below.

#### Using the number buttons

Set the remote control mode selector to



Examples: 3: 3

13:  $(+10) \rightarrow (3)$ 

20:  $(+10) \rightarrow (10)$ 

23:  $(+10) \rightarrow (+10) \rightarrow (3)$ 



- To return to step 2, press CANCEL
- Set the minute in the same manner as steps 2 and 3.

10:10

# Adjusting the clock

Press four times to display the clock, and then adjust the clock starting from step 2.

### Displaying the clock while using the main unit

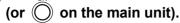
Press repeatedly.

- The time display on the main unit is a 24-hour
- · The clock will gain or lose approximately 1 minute
- · Set the clock again after you have disconnected the power plug or a power cut has occurred.

### **Turning On/Off the Main Unit**

Used frequently

# Press (or (



 With the power off, pressing either button also turns on the main unit. The function assigned to the button starts working at the same time.

Remote control:









#### NOTE

 Cooling fan is built into the main unit for emitting generated heat. When you turn on the main unit, the internal cooling fan automatically starts rotating.

### **Adjusting the Volume**

Used frequently

# Press



 You can also adjust the volume by turning the VOLUME control on the main unit.

#### NOTE

You can adjust the volume within the range of 0 to

# Temporarily Turning Off the Sound (FADE MUTING)

Press O

- "FADE MUTING" appears and the volume reduces to "0".
- To return to the previous volume, press

again.

# **Emphasizing Heavy Bass Sound (AHB PRO)**

# Press AHB PRO

- Each time you press , AHB PRO function toggles between "ON" and "OFF".
- While AHB PRO function is activated,
   AHB PRO is displayed in the display window.
- "AHB PRO" stands for "Active Hyper Bass PRO".

# **Adjusting the Sound Quality**

# Selecting the sound mode

# Press OUND

• Each time you press , the display toggles as follows.



J*A77* 

MANUAL

- : For emphasizing treble and bass sounds.
- : Adequate for songs and narrations.
- : For emphasizing treble sound.
- : For uplifting a feeling of being at a live performance.
- : For adjusting treble and bass sounds of your choice (shown below).
- : Cancels the sound mode (initial setting).
- While the sound mode is set to an item other than "FLAT", SOUND is displayed in the display window.

#### NOTE

• This function does not affect recording sound.

# Adjusting bass/treble sound

- 1 Press repeatedly to display "MANUAL".
- 2 For adjusting bass sound;

Press — +

For adjusting treble sound;

Press — +.

- You can adjust the sound quality within the range of -5 to +5.
- The display returns to the sound source display in a few seconds.

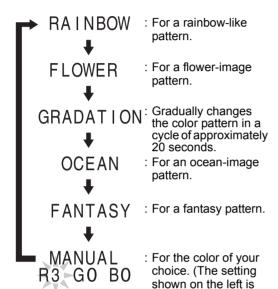
#### NOTE

 While the sound mode is set to an item other than "MANUAL", "NO OPERATE" is displayed in the display window and you cannot adjust bass/treble sound.

# **Changing the Color Patterns** for the Display Window and Disc Tray

# Press $\bigcirc^{\text{COLOR}}$ (or $\bigcirc^{\text{COLOR}}$ on the main unit).

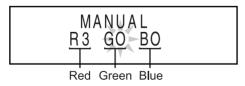
• Each time you press , the display toggles as follows.



Setting your favorite color for the display window and disc tray

initial setting.)

- 1 Press repeatedly to display "MANUAL".
- Press PREVIOUS or NEXT to select a component color.



 Numerical value of the selected component color flashes.

# 3 Press



### to adjust the intensity

#### of the component color.

- You can also adjust the color intensity by turning the VOLUME control on the main unit.
- You can adjust the color intensity within the range of "0" to "3".

You cannot set all three component colors (red, green, and blue) to "0" at the same time.

#### NOTE

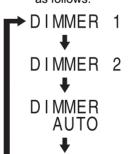
- After you have adjusted each component color, the display returns to the sound source display in approximately 8 seconds.
- You cannot set different colors for the display window and disc tray.
- When you operate a button on the main unit or remote control, the display window and disc tray light in pale blue for approximately 2 seconds.
- When recording finishes, the color of the display window and disc tray switches to the color set in "MANUAL" to inform you that recording has finished. (With an item other than "MANUAL" selected)

When you operate the main unit after recording finishes, the color pattern for the display window and disc tray returns to the selected pattern.

# Changing the brightness of the display window and disc tray (DIMMER)

# Press Olmmer.

• Each time you press , the display toggles as follows.



- : Color pattern becomes dimmer.
- Color pattern becomes darker, and switches to blue.

  DIMMER 2 is automat-
- DIMMER AUTO

  Under AUTO

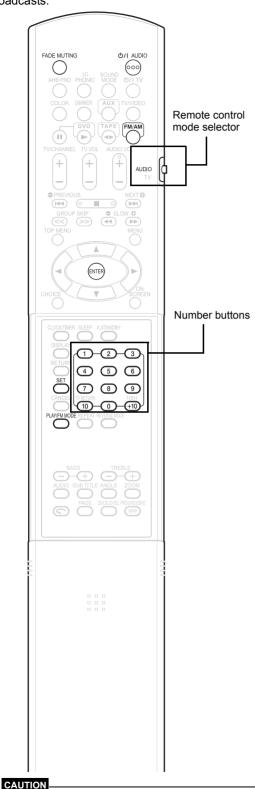
  DIMMER 2 is automatically selected during video playback, and is canceled when the playback stops.

  DIMMER OFF: Cancels the brightness

Cancels the brightness adjustment (initial setting).

- When you turn off the main unit, the brightness also returns to the initial setting.
- · You cannot turn off the color pattern.

This product can receive FM and AM radio broadcasts.



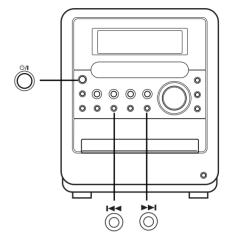
- Set the remote control mode selector to  $_{\rm AUDIO}$  AUDIO before using the number buttons.  $_{\rm TV}$ 



# **Setting the AM Tuner Spacing**

Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.

#### On the main unit ONLY:



#### ■When the main unit is turned off

To select 10 kHz spacing, while holding down on the main unit, press on the main unit to turn on the power. "AM 10 kHz" appears in the display window.

To select 9 kHz spacing, while holding down on the main unit, press on the main unit to turn on the power. "AM 9 kHz" appears in the display window.

#### NOTE

• If the spacing is switched, the memory in which the radio stations were stored will be erased.

# Selecting a Radio Station

1 Press repeatedly to select "FM" or "AM".

Example: Display while an FM radio broadcast is received

Stereo indicator Preset number (P on the right)

FM 1

8 7. 5 0 MHz,

Frequency

Press errevious or ► repeatedly to select a radio station (frequency).

 You can also select a radio station using the automatic tuning.

#### **Automatic tuning:**

Hold down or west until the frequency starts changing, and then release the button.

When the main unit has received a broadcast, the frequency automatically stops changing.

To quit the function while searching for a broadcast, press PREVIOUS or NEXT (FI).

• When the main unit has received an FM stereo broadcast, "STEREO" lights up.

#### NOTE

- If an FM stereo broadcast is difficult to hear because of noise, you may be able to hear more easily by pressing to switch the sound to monaural reception. In this case, "MONO" lights up. To return the sound to stereo reception, press
- This product is not compatible with AM stereo broadcasts.

# Storing Radio Stations (Preset)

You can store up to 30 FM radio stations and up to 15 AM radio stations.

- ■While the broadcast from the radio station you want to preset is being received
- 1 Set the remote control mode selector to AUDIO.



- 2 Press .
  - The preset number flashes for approximately 5 seconds.
- While the preset number is flashing, press the number buttons (
  - 10 or 100+) to select the preset number you want to use.
- 4 While the selected number is flashing, press ...
  - "STORED" appears and the selected radio station is stored.

#### NOTE

 When you store a radio station to a preset number to which another radio station has previously been stored, the newly set radio station replaces the previously stored radio station.

# Tuning In to a Preset Radio Station

- ■While an FM or AM broadcast is being received
- 1 Set the remote control mode selector to AUDIO.



- 2 Use the number buttons to select the preset number of the radio station to which you want to tune in.
  - Refer to "Using the number buttons" (page 16).

# **Basic Operations of the DVD Player**

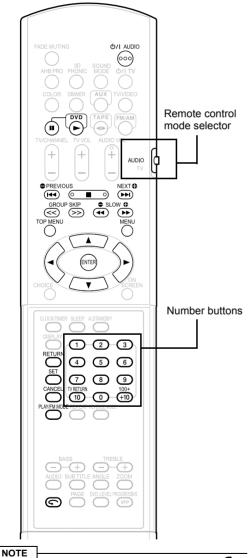
#### How to read this manual

- Operations are described by mainly using the remote control buttons. If there are the same marks on the main unit, the buttons on the main unit can also be used.
- The following marks tell you for which type of the discs the operation can be made.



#### **JPEG**

- The illustrations and TV screens may be different between the actual case and the description.
- · "VCD" stands for "Video CD".
- · "SVCD" stands for "Super Video CD".



 Set the remote control mode selector to  $_{\rm AUDIO}$  AUDIO before using the number buttons.  $_{\rm TV}$ 



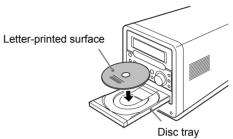
### **Playback**

Used frequently

# DVD DVD VCD SVCD C D

(Refer to page 36 for playing back MP3/WMA and JPEG.)

- 1 Press on the main unit.
  - The disc tray comes out.
- 2 Place a disc on the disc tray.



• When you want to listen to an 8 cm disc, place it on the inner hollow of the disc tray.

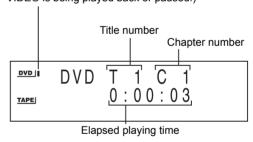
# 3 Press Prop.

■ Display for DVD VIDEO

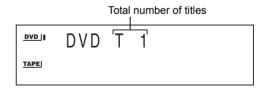
Display while a DVD VIDEO is being played back:

DVD indicator

(The DVD indicator lights up while the DVD VIDEO is stopped. The DVD indicator flashes while the DVD VIDEO is being played back or paused.)



#### Display while the DVD VIDEO is stopped:

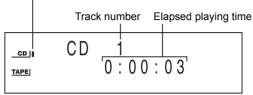


#### ■Display for CD

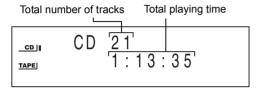
#### Display while a CD is being played back:

CD indicator

(The CD indicator lights up while the CD is stopped. The CD indicator flashes while the CD is being played back or paused.)



#### Display while the CD is stopped:

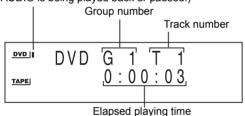


#### ■Display for DVD AUDIO

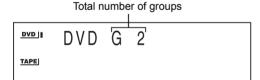
# Display while a DVD AUDIO is being played back:

**DVD** indicator

(The DVD indicator lights up while the DVD AUDIO is stopped. The DVD indicator flashes while the DVD AUDIO is being played back or paused.)



#### Display while the DVD AUDIO is stopped:



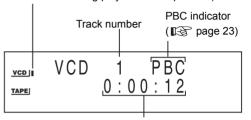
• "G1" and "T1" will appear after the total number of groups is displayed.

#### ■Display for VCD/SVCD

# Display while a VCD/SVCD is being played back:

VCD indicator

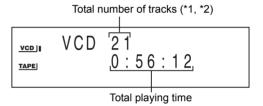
(The VCD indicator lights up while the VCD/SVCD is stopped. The VCD indicator flashes while the VCD/SVCD is being played back or paused.)



Elapsed playing time

PBC indicator is displayed while PBC is activated.

#### Display while the VCD/SVCD is stopped:



- \*1 "1" will appear after the total number of tracks is displayed.
- \*2 "PBC" will appear when the disc is PBC-compatible.

#### NOTE

- The menu may appear in the display window after DVD playback starts. In such a case, select the desired menu item by using the following buttons on the remote control.
  - Select a menu item with , or •

and then press enem.

- Select a menu item with the number buttons.
- Operation may differ from the explanation given here, depending on the disc type.

#### Messages displayed on the TV screen

While a DVD is selected as the sound source, the messages shown below are displayed, depending on the status.

#### **NOW READING**

The main unit is reading the disc. Wait for a while

#### **REGION CODE ERROR!**

The disc cannot be played back because its region code is not compatible. ( page 4)

#### **NO DISC**

No disc is loaded.

#### **OPEN**

The disc tray is opening.

#### **CLOSE**

The disc tray is closing.

#### **CANNOT PLAY**

You are trying to play back an unplayable disc.

# Guide icons temporarily displayed on the TV screen (on-screen guide)



: Play

(pg page 21)

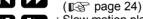


: Pause

(**I** page 24)



: Fast reverse/Fast forward search









: Containing multi-audio ( page 26)





The disc cannot accept the operation you have attempted.

#### PBC (Playback control)

- PBC is a signal recorded in a VCD (version 2.0) for controlling VCD playback.
   You can operate software that has interactive or search functions using the menu display recorded in a PBC-compatible VCD. To play back a VCD without PBC, follow the operation below.
- Select the desired track number with the number buttons while playback is stopped.
- While playback is stopped, press PREVIOUS or NEXT to select the desired track number, and then press DVD.
- While a VCD or SVCD is being played back, press BETURN to return to the higher menu group.

### Playing Back from a Position 10 Seconds Before (One Touch Replay)

#### DVD VIDEO

■While a disc is being played back

#### Press ©.

- This operation may not be carried out for some discs.
- · You cannot return to the previous title.

### **Stopping Playback**

Used frequently

# DVD DVD VCD SVCD C D MP3 JPEG

■While a disc is being played back

Press **■ ③**.

# **Resuming Playback (RESUME)**

### DVD DVD VCD SVCD

When playback is stopped in the middle, playback can be started from the stopped scene.

#### How to suspend playback

■While a disc is being played back
Perform any of the following operations during playback.

Press once.\*

Press to turn off the power.

Change the source to FM/AM or AUX.\*

\* Even if the power is turned off by pressing

after this, the position where playback has been stopped will be stored.



# How to start playback from the stored position

Press PVD

NOTE

- This function does not work in program playback or random playback.
- The position where playback starts again may be a little different from the stopped position.
   When a disc many is displayed, the resume func-
- When a disc menu is displayed, the resume function may not work.
- The audio, the subtitle and the angle at that time are stored as well as the stopped position.
- The stored position will be cleared if the disc tray is opened. Further, if is pressed during playback, "RESUME" appears. If is pressed at this time, "RESUME" will disappear and the stored information will be cleared.
- Resume function is set to on as the initial preset. You can set the function to off (LSP page 39).

## **Pausing Playback**

### DVD DVD VCD SVCD C D MP3 JPEG

■While a disc is being played back

Press .

To resume normal playback, press (DVD)

Playback cannot be paused by pressing on the main unit during JPEG disc slide-show.

### Advancing Picture Frame by Frame

## DVD SVCD VCD DVD AUDIO

(only for moving image)

■While a disc is paused

Press 🔳.

- Each time you press (n), picture will be advanced frame by frame.
- You cannot operate this function with on the main unit.

# Fast Reverse/Fast Forward Search Used frequently

## DVD DVD VCD SVCD C D

There are two methods.

■While a disc is being played back

Press or or

• Each time you press  $\stackrel{\bullet}{\clubsuit}$  or  $\stackrel{\bullet}{\blacktriangleright}$ , the speed increases as shown below.

• To restore the normal speed, press ( )

# Hold down ⊕PREVIOUS or ► .

 Fast reverse/fast forward search can be carried out only while the button is pressed.

- For a DVD VIDEO, SVCD or VCD, no sound comes out during fast reverse/fast forward search.
- For a CD or DVD AUDIO, sound is intermittent during fast reverse/fast forward search.

# **Slow Motion Playback**

## DVD VCD SVCD DVD

(only for moving image)

■While a disc is paused

Press 

SLOW 

SLOW 

Fach time you press 

SLOW 

SLOW increases as shown below.

 $1/_{32} \Rightarrow 1/_{16} \Rightarrow 1/_8 \Rightarrow 1/_4 \Rightarrow 1/_2$ 

• Press (ii) to pause playback, and press (iii) to resume normal playback.

#### NOTE

- · No sound will be produced.
- The picture motion in the reverse direction may not be smooth.
- For a VCD or SVCD, slow motion playback can be carried out in the forward direction only.

#### Skipping to the Beginning of a **Track** Used frequently

# DVD DVD VCD SVCD C D MP3 JPEG

■While a disc is being played back\*

Press ♣PREVIOUS or ♠EXT♠.

- Each time you press PREVIOUS, the current chapter/track/file skips to the beginning of the previous chapter/track/file.
- Each time you press (FFI), the current chapter/ track/file skips to the beginning of the next chapter/track/file.
- Press or or select a title or group.

#### NOTE

- \* For a VCD or SVCD, this operation can be carried out only during playback without the PBC function.
- · Except for a DVD VIDEO, this operation can also be carried out while the disc is stopped.
- This operation may not be carried out for some discs.

### Skipping to the Beginning of a Track with the Number Buttons

# DVD DVD VCD SVCD C D MP3 JPEG

- ■While a disc is being played back
- Set the remote control mode selector to AUDIO.



### Press the number buttons (1)-10 or (+10) to select the track/chapter you want to listen to.

Refer to "Using the number buttons" (**P** page 16).

#### NOTE

- · You can operate a VCD or SVCD while the disc is stopped or played back with PBC off.
- You can operate a DVD AUDIO, CD, MP3, WMA, or JPEG while the disc is either played back or stopped
- · This operation may not be carried out for some

### Selecting a Track from the Menu Screen

### DVD DVD VCD SVCD

- ■While a disc is stopped or being played back\*
- Set the remote control mode selector to AUDIO.

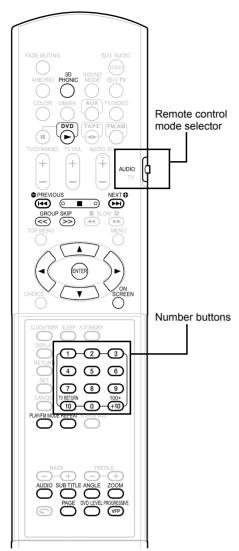


- Press or or or.
  - A menu screen of the disc appears.
  - Only can be used for DVD AUDIOs.
- **3** Press **△ ○ ○ ○ ○** (only for a DVD VIDEO or a DVD AUDIO) or the number buttons to select a
  - track you want to listen to. Refer to "Using the number buttons" (**P** page 16).
  - · If there are two or more pages of menu screen, press or Next to change the pages (only for a VCD or SVCD).

# Press (ENTER)

- \* You can operate a VCD or SVCD while PBC is set
- · You cannot perform this function with discs to which a menu screen is not recorded.
- Some disc may start playback even if you do not press (ENTER).

# **Convenient Functions of the DVD Player**



Set the remote control mode selector to AUDIO AUDIO before using the number buttons.

TV

NOTE



## **Selecting the Audio**

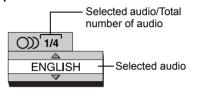
Used frequently

### DVD DVD VCD SVCD

■While a disc containing two or more audio is being played back

# 1 Press .

**Example: TV screen** 



• Each time you press on, the audio will be changed. The audio can also be changed by pressing .

### Wait for a few seconds or press



- You can also operate this function by using the menu bar ( page 34).
- For a language code such as "AA", refer to "Language Codes" ( Page 241).
- When 2 channel sounds are recorded in 1/2 and multi channel sounds with down-mix prohibited are recorded in 2/2 in a DVD AUDIO, you can select 1/2 only.

## **Selecting the Subtitle**

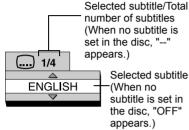
### DVD SVCD DVD

(only for moving image)

While a disc containing two or more subtitles is being played back

# 1 Press SUB TITLE.

**Example: TV screen** 



- 2 Press to select a subtitle.
- 3 Wait for a few seconds or press



NOTE

- You can also operate this function by using the menu bar ( page 34).
- For an SVCD, each time you press on step 1, the subtitle type and ON/OFF will be changed.
- For a language code such as "AA", refer to "Language Codes" ( page 41).
- The manner of displaying subtitles may be different depending on the disc.

# Canceling the subtitle

Press to select "OFF".

## **Selecting a View Angle**

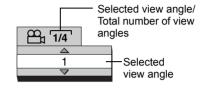
#### DVD DVD VIDEO AUDIO

(only for moving image)

■While a disc containing two or more view angles is being played back

# 1 Press ANGLE.

#### **Example: TV screen**



• Each time you press on, the angle will be changed. The angle can also be changed by pressing (\*\*).

### 2 Wait for a few seconds or press



#### NOTE

 You can also operate this function by using the menu bar ( page 34).

# Magnifying the Picture (ZOOM)

# DVD VCD SVCD DVD JPEG

(only for moving image)

■While a disc is played back or paused

# 1 Press O

- Each time you press , the picture magnification will be changed (OFF, ZOOM1 - 6).
- When a JPEG disc is used, the picture magnification changes through "ZOOM 1", "ZOOM 2" to "OFF". You cannot change the picture magnification during slide-show playback.

## 2 Select the portion you want to see



#### CAUTION

 When you magnify a picture, image quality may be deteriorated or image may be distorted.

## **Adjusting the Picture Quality** (VFP)

### DVD DVD VCD SVCD JPEG

■While a disc is played back or paused

### Press (VFP).

**Example: TV screen** 

Current VFP mode USER1 -GAMMA BRIGHTNESS 0 CONTRAST SATURATION n SHARPNESS

#### Setting items

**GAMMA** Controls the brightness of neutral

tints while maintaining the brightness of dark and light

portions.

(Setting range: -3 - +3)

BRIGHTNESS: Controls the brightness of the

display.

(Setting range: -8 - +8) CONTRAST : Controls the contrast of the

display.

(Setting range: **-7 - +7**)

SATURATION: Controls the saturation of the

display.

(Setting range: -7 - +7)

TINT : Controls the tint of the display.

(Setting range: -7 - +7)

SHARPNESS: Controls the sharpness of the

display.

(Setting range: -8 - +8)

### Press ( to select VFP mode.

**NORMAL** : For normal playback.

(You cannot adjust the image

quality.)  $\rightarrow$  Go to step 7.

**CINEMA** : Suitable when viewing a movie in

a dim room.

(You cannot adjust the image

quality.)  $\rightarrow$  Go to step 7.

USER1/USER2: You can adjust the image quality.

 $\rightarrow$  Go to step 3.

### Press to select an item you want to adjust.

Press (ENTER)

#### Example:



- Press to change the value.
- Press (ENTER
  - To adjust other items, go back to step 3.
- Press (VFP).

#### NOTE

- · If no operation is made for several seconds during the procedure, the settings made so far will be automatically stored.
- "VFP" stands for "video fine processor".

## **Creating Realistic Sound** (3D PHONIC)

# DVD DVD VCD SVCD CD MP3 WMA

The two speakers produce an effect resembling surround-sound.

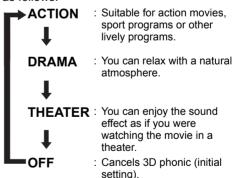
■While a disc is being played back



#### **Example: TV screen**



· Each time you press the display toggles as follows.



 While 3D phonic is activated. 3D PHONIC is displayed in the display window.

- 3D phonic is effective for both the speakers and headphones.
- When noise is produced or sound is distorted. set "3D PHONIC" to "OFF".
- You cannot operate some types of DVD AUDIO discs.

# Adjusting Playback Level (DVD LEVEL)

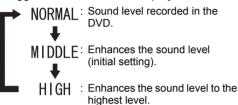
### DVD DVD

The audio of a DVD VIDEO and DVD AUDIO may be recorded at a lower level (volume) than for other types of disc. You can adjust the DVD level.

■While a disc is being played back

## Press OVD LEVEL.

 Each time you press , the display toggles as follows in the display window.



 Select the level while listening to the sound played back.

#### NOTE

- DVD level is effective only for playback of a DVD.
- Even if the DVD level is changed, the output level from the digital audio output terminal will not be changed.
- This function does not affect recording sound.

# **Enjoying Better Pictures** (PROGRESSIVE)

In the progressive mode, you can enjoy better pictures.

#### CAUTION

- In order to enjoy pictures in the progressive mode, the following requirements should be met.
  - There must be component video input terminals on the TV set connected to the main unit.

When the above requirements are not satisfied, leave the main unit in the Interlace mode. If the progressive mode is set, pictures may be distorted.

■While the disc is played back or paused

## Hold down VFP.

• Each time you press (vF), the display toggles as follows.

Interlace mode (initial setting)

INTERLACE



#### Progressive mode

**PROGRESSIVE** 

# Playing Back the Bonus Group

#### DVD AUDIO

There are some DVD AUDIO discs with a special group, called "bonus group", recorded.



- This operation can be carried out when "BONUS" is lit in the display window on the main unit.
- ■While a disc is being played back
- 1 Set the remote control mode selector to AUDIO.



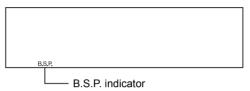
# Press SROUP SKIP repeatedly during playback to select a bonus group.

- "KEY\_\_\_\_" appears on the TV screen and in the display window on the main unit.
- 3 Press the number buttons to enter a pin code (4 digits).
  - The method of getting a pin code is different depending on the disc.
- 4 Press (ENTER).
  - When a correct pin code is entered, "BONUS" disappears and the playback of the bonus group starts.
  - If an incorrect pin code is entered, try entering a correct pin code again.

# **Browsable Still Pictures** (B.S.P.)

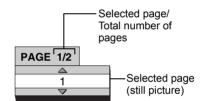
#### DVD

There are some DVD AUDIO discs with still pictures recorded. Among the still pictures, there are pictures called B.S.P. (browsable still pictures). You can change these pictures as if turning over pages.



- This operation can be carried out when "B.S.P." is lit in the display window on the main unit.
- ■While a disc is being played back
- 1 Press .
  - Each time you press , the still picture will be switched over.

#### **Example: TV screen**



## 2 Wait for a few seconds or press



### NOTE

# Playing Back the Disc in the Desired Order (Program Playback)

### DVD DVD VCD SVCD C D MP3 WMA

You can program a maximum of 99 chapters or tracks. You can program the same chapter or track more than once.

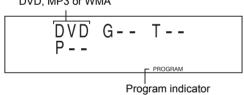
- ■While a disc is stopped
- 1 Set the remote control mode selector to AUDIO.



# 2 Press to select "PROGRAM".

■Display for DVD VIDEO

# ■ Display for DVD AUDIO/MP3/WMA DVD, MP3 or WMA

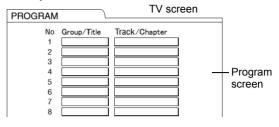


### ■ Display for CD/VCD/SVCD



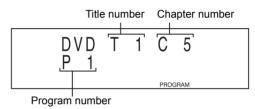
"VCD" is displayed while Program indicator VCD/SVCD is selected.

#### **Example: For DVD VIDEO**



### 

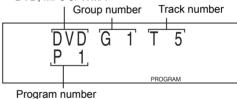
- Display for DVD VIDEO
  - Select a title number, and then select a chapter number.



#### ■ Display for DVD AUDIO/MP3/WMA

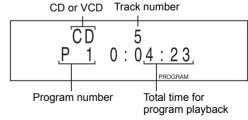
• Select a group number, and then select a track number.

DVD, MP3 or WMA



#### ■Display for CD/VCD/SVCD

Select a track number.



#### **Example: For DVD VIDEO**

PROGRAM		I V screen
No.	Group/Title	Track/Chapter
1	1	5
2		
3		
4		
5		
6		
7		
8		

- Refer to "Using the number buttons" (page 16).
- Before selecting a bonus group of a DVD AUDIO, cancel the "BONUS" display as explained in "Playing back the Bonus Group" on page 30.
- When you try to enter more than 99 chapters or tracks, "MEMORY FULL" appears.

# 4 Press PVD

Confirming programmed content

### While playback is stopped, press

PREVIOUS or NEXT⊕ repeatedly.

 During this operation, you can add a track as the last in the program, or erase the last track. ( step 3)

# Canceling program playback

While playback is stopped, press

repeatedly to display an item other than "PROGRAM".

• This operation does not erase the programmed content.

## Erasing the whole program

## While playback is stopped, hold down



#### NOTE

 Ejecting the disc or turning off the main unit also erases the programmed content. This operation also cancels program playback.

## **Random Playback**

## DVD DVD VCD SVCD C D MP3 WMA

You can listen to tracks or chapters in random order.

- While playback is stopped
- 1 Press repeatedly to select "RANDOM".

#### **Example: For CD**



• "RANDOM" appears in the TV screen.

# 2 Press PVD

#### NOTE

- Pressing repeatedly does not return playback to the previous track.
- · Each track is played back once.

# Canceling random playback

While playback is stopped, press

PLAYFEMMODE repeatedly to display an item other than "RANDOM".

#### NOTE

 Ejecting the disc or turning off the main unit also cancels random playback.

# **Repeat Playback**

### DVD DVD VCD SVCD C D

Refer to page 37 for repeat playback of MP3/WMA and JPEG files.

■While a disc is being played back

# Press CEPEAT.

• Each time you press effect, the repeat type will be changed.

#### For DVD VIDEO

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current chapter	CHAP*	REPEAT CHAPTER* <sup>⊊</sup>
Repeats the current title	TITLE	REPEAT TITLE ⊊ALL
Cancels repeat	<b>○</b> OFF	REPEAT OFF

#### For DVD AUDIO

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current track	TRACK*	REPEAT TRACK* ←
Repeats the current group	<b>◯</b> GROUP	REPEAT GROUP GROUP
Cancels repeat	<b>₾</b> OFF	REPEAT OFF

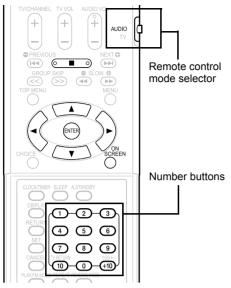
#### For CD/VCD/SVCD

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current track	TRACK*	REPEAT TRACK* ←
Repeats all tracks	ALL ALL	REPEAT ALL ⊊ALL
Cancels repeat	OFF OFF	REPEAT OFF

<sup>\* &</sup>quot;STEP" is displayed during program playback or random playback.

- For a VCD and SVCD, the operation can be carried out during playback without the PBC function (Page page 23).
- You can also operate this function on the menu bar ( page 34).
- For details on A-B repeat (repeat playback of a designated part), refer to page 35.

# **Status Bar and Menu Bar**



DVD DVD VCD SVCD CD

You can display the status bar and menu bar on the TV screen, and can control discs with the bars.

#### CAUTION

• Set the remote control mode selector to AUDIO AUDIO before using the number buttons. TV



# Using the Status Bar and Menu Bar

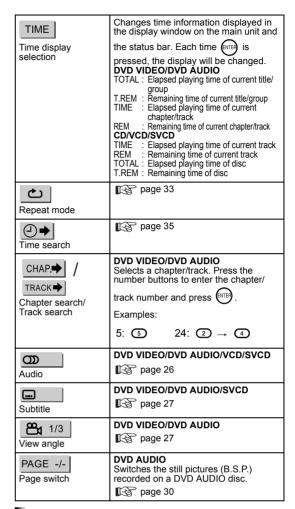
- ■While a disc is being played back
- 1 Press on twice.



- The above is an example for a DVD VIDEO.
- 2 Press to select an item you want to operate.
- 3 Press energy.
  - You can set the selected function. For the setting items, refer to the following "Function list".
  - The currently active function shows blue.
  - To cancel the menu bar, press SCREEN

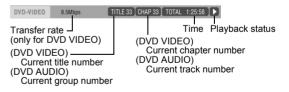
# Function list

Press to select, and press to determine unless otherwise noted.

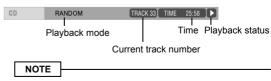


# Information displayed on the status bar

DVD VIDEO/DVD AUDIO (the example below is for a DVD VIDEO)



VCD/SVCD/CD (the example below is for a CD)



 The playback status mark has the same meaning of the mark on the on-screen guide ( page 23).

# Playing Back the Designated Part Repeatedly (A-B Repeat Playback)

## DVD DVD VCD SVCD C D

■While a disc is being played back

1 Press Coreen twice.

• The menu bar ( page 34) appears.

2 Press to select off.

3 Press enter.

4 Press to select

5 Press at the starting point of the part to be repeated (designating A point).

• The icon on the menu bar will be 🖒 🗀 .

6 Press at the end of the part to be repeated (designating B point).

• The icon on the menu bar will be 🖒 🕒 🕒 🕒 🕒 .

" $\subset$  A-B" appears in the display window on the main unit and the part between A and B points is played back repeatedly.

# Canceling A-B repeat playback

- To cancel A-B repeat playback:
  - Press **■** .
  - Select and press twice. (Select oppin).)

#### NOTE

- You can operate a VCD and SVCD while the disc is played back with PBC off.
- A-B repeat playback is possible only within the same title or track. A-B repeat playback cannot be carried out during PBC playback, program playback, random playback and repeat playback.

# Designate the Time (Time Search)

## DVD DVD AUDIO VCD SVCD CD

■While a disc is being played back

1 Set the remote control mode selector to AUDIO.



2 Press COREEN twice.

• The menu bar appears ( page 34).

3 Press ( ) to select ( →).

4 Press 🖭.

5 Enter the time using the number buttons (1-9, 0).

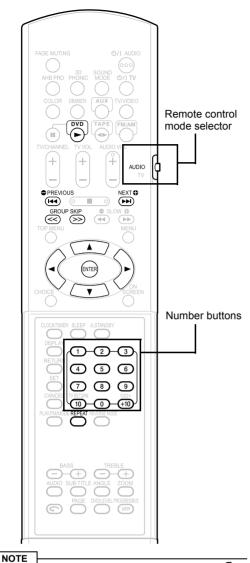
Example: When you want to play back a disc from the position of (0 hour) 23 minutes 45 seconds, press the buttons in the order:



- You can skip entering "minutes" and "seconds".
- If you enter wrong numbers, press to delete the numbers, and then enter the numbers again.
- 6 Press enter.
  - To delete the menu bar, press SCREEN

- You may not be able to operate this function depending on the disc.
- This function does not work during program playback or random playback.
- For a CD, this operation can always be carried out. For a VCD or SVCD, the operation can be carried out when the disc is stopped or during playback without the PBC function.
- Time search for a DVD VIDEO is from the beginning of the title, for a DVD AUDIO is from the beginning of the track being played back. Time search for a VCD, SVCD and a CD is as follows:
- When the disc is stopped, time search is from the beginning of the disc.
- When the disc is being played back, time search is within the track currently being played back.

# Playing Back MP3/WMA and JPEG Discs



 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.

# **Playback**

# MP3 WMA JPEG

Display of an MP3/WMA disc is described here as an example.

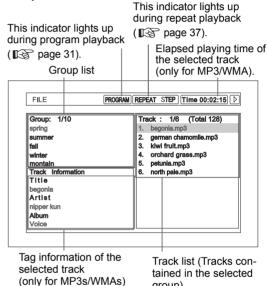
For a JPEG disc, read "track" as "file".

#### NOTE

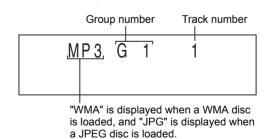
 When playing back a disc containing both MP3/ WMA and JPEG files, set one of them to be played ( page 38).

#### Insert a disc.

#### **Example: TV screen**



#### **Example: Display window**



group)

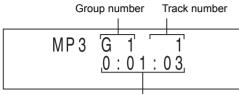
- Press to select a group.
- **Press** to move to the track list. Pressing (
   returns to the group list.

(Continued on next page)

# 4 Press 🗘 🔻 to select a track.

# 5 Press or enter.

**Example: Display during playback** 



Elapsed playing time (This indicator is not displayed while a JPEG is loaded.)

- · At first, a track title (file name) is scrolled.
- When an MP3 or WMA is loaded, tag information (title/artist/album) is scrolled followed by a track title.
- Only alphanumerical one-byte characters are displayed properly as a track title or tag information.

#### NOTE

- You can also use and also use and in step 2.
- You can also use the number buttons in step 4. In this case, steps 3 and 5 are not needed. Refer to "Using the number buttons" ( page 16).
- You can also use represent or represent in step 4. In this case, step 3 is not needed.

### Slide-show playback JPEG

- For a JPEG disc, when you press 5, files are continuously played back from the selected file (slide-show playback). When you press 7, only a selected file is played back.
- A file is displayed for approximately 3 seconds in a slide-show playback.
- After all files are played back, the playback is automatically stopped.

## Repeat Playback

#### MP3 WMA JPEG

■While a disc is being played back

Press CEPEAT.

• Each time you press entry, the repeat type is changed.

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current track (only for MP3/ WMA)	REPEAT TRACK*	REPEAT* TRACK ←
Repeats the current group	REPEAT GROUP	REPEAT GROUP
Repeats the entire disc	REPEAT ALL	REPEAT ALL ⊊ALL
Cancels repeat playback	No display	REPEAT OFF

\* "STEP" is displayed during program playback and random playback.

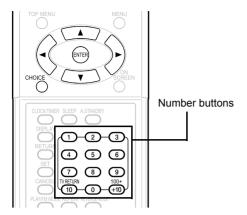
#### NOTE

- The repeat types can also be changed while the disc is stopped.
- The repeat playback is automatically canceled if there is a file that cannot be played back

( **P** page 4).

# **Preferences**





You can change the initial settings of this product according to the environment the product is used

#### CAUTION

· Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



#### NOTE

· The top and bottom of the preference screen may not be displayed on a wide TV. Adjust the picture size on the TV.

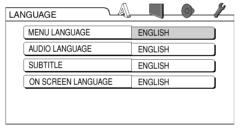
## **Basic Operations**

This section explains basic operation for changing various settings.

■While a disc is stopped or no disc is loaded (while "NO DISC" is displayed)

# **Press**

 "SETTING" appears in the display window on the main unit and the following screen appears on the TV.



 Proceed with operations by following the description on the TV screen.

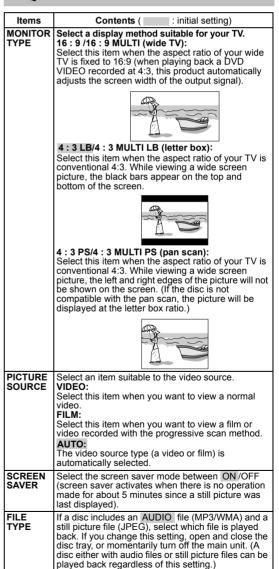
# **LANGUAGE**

#### NOTE

- · If the selected language is not recorded on the disc, the optimum language set for the disc appears.
- · For a language code such as "AA", refer to the "Language Codes" ( P page 41).

Items	Contents
MENU LANGUAGE	Select the language for the DVD VIDEO menu.
AUDIO LANGUAGE	Select the audio language for the DVD VIDEO.
SUBTITLE	Select the subtitle language for the DVD VIDEO.
ON SCREEN LANGUAGE	Select the language displayed on the preference screens.

# **PICTURE**



# O AUDIO

Items	Contents ( : initial setting)		
DIGITAL AUDIO OUTPUT	Select an output signal type from the following in accordance with the equipment connected to the digital audio output terminal (AV amplifier, etc.). (See the list below for the preference items and output signal.)		
	PCM ONLY: Equipment corresponding only to linear PCM.		
	<b>DOLBY DIGITAL/PCM:</b> Dolby digital decoder or equipment having the same function.		
	STREAM/PCM: DTS/Dolby digital decoder or equipment having the same function.		
DOWN MIX	Switch signal from the digital output terminal of the DVD VIDEO according to the connected equipment. Select this when Digital Audio Output is set to "PCM ONLY".		
	DOLBY SURROUND: A dolby pro logic decoder-built-in equipment.		
	STEREO: An ordinary equipment.		
	When 3D phonic is activated, Down Mix does not work.		
D (Dynamic). RANGE COMPRESSION	To make adjustments for the difference between a high volume and a low volume when playing back with low volume (only for a DVD recorded with Dolby digital).		
	AUTO : D. range compression automatically works.		
	ON: D. range compression always works.		



Items	Contents ( : initial setting)
RESUME	( page 24)
ON SCREEN GUIDE	Select whether you display guide icons on the on-screen guide indicating status of a disc/main unit (For details on the guide icons, refer to page 23)
AV COMPU LINK MODE	When you want to control JVC TV by using this product, select a mode that matches the terminal from the following. (For more details, refer to "Using AV COMPU LINK" on page 51.)
	DVD1: Connect to the video-3 input on the TV set.
	DVD2: Connect to the video-1 input of the TV set.
	DVD3: Connect to the video-2 input of the TV set.
PARENTAL LOCK	Set the parental lock function to cut off violent scenes or replace the scenes with others. (This is effective only for discs equipped with the parental lock function.)
	COUNTRY CODE ( page 40) Select your country or area.
	SET LEVEL: The restriction is stricter as the number becomes smaller. "NONE" is no restriction.
	PASSWORD (essential): Enter four-digit number as your password using the number buttons (1-9, 0) every time. (Enter "8888" if you forget your password.) The password is required at the time of playback.
	If you enter a wrong password three times,     "EXIT" will be automatically selected.

# List of relationships of DIGITAL AUDIO OUTPUT preference items and output signal

Dlauback dies	DIGITAL AUDIO OUTPUT preference		
Playback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
48 kHz, 16/20/24 bits Linear PCM DVD VIDEO 96 kHz linear PCM DVD VIDEO		48 kHz, 16 bits stereo linear PCN	1
48/96/192 kHz, 16/20/24 bits linear PCM DVD AUDIO		48 kHz, 16 bits stereo linear PCN	1
44.1/88.2/176.4 kHz, 16/20/24 bits linear PCM DVD AUDIO	4	4.1 kHz, 16 bits stereo linear PC	М
DTS DVD VIDEO	DTS bit stream	48 kHz, 16 bits s	tereo linear PCM
DOLBY DIGITAL DVD VIDEO/ DVD AUDIO	DOLBY DIGI	ΓAL bit stream	48 kHz, 16 bits stereo linear PCM
CD/VCD/SVCD	44.1 kHz, 16 bits stereo linear PCM/48 kHz, 16 bits linear PCM		
DTS CD	DTS bit stream	44.1 kHz, 16 l	oits linear PCM
MP3/WMA disc	32/44.1/48 kHz, 16 bits linear PCM		

<sup>•</sup> For a DVD VIDEO without content protection set, there is a 20 bit or 24 bit output at the digital audio output terminal.

# **Country/Area Codes**

AE United Arab Emirates AF Afghanistan AG Antigua and Barbuda AI Anguilla AL Albania AM Armenia AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara ER Eritrea	4.0	
AF Afghanistan AG Antigua and Barbuda AI Anguilla AL Albania AM Armenia AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara	AD	Andorra
AG Antigua and Barbuda AI Anguilla AL Albania AM Armenia AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominica Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara		
Al Anguilla AL Albania AM Armenia AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominica REC Ecuador EE Estonia EG Egypt EH Western Sahara	AF	Afghanistan
AL Albania AM Armenia AM Armenia AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Cecusal EE Estonia EG Egypt EH Western Sahara	AG	Antigua and Barbuda
AM Armenia AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CZ Ecuador EE Estonia EG Egypt EH Western Sahara	ΑI	Anguilla
AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BW Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Domican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara	AL	Albania
AN Netherlands Antilles AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BW Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Domican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara	AM	Armenia
AO Angola AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chille CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara		
AQ Antarctica AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BB Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BW Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuado EE Estonia EG Egypt EH Western Sahara		
AR Argentina AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara		
AS American Samoa AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara		
AT Austria AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara		
AU Australia AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuado EE Estonia EG Egypt EH Western Sahara		
AW Aruba AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara		
AZ Azerbaijan BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara		Australia
BA Bosnia and Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CE Ecuador EE Estonia EG Egypt EH Western Sahara	AW	Aruba
Herzegovina BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Cristmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CZ Ecuador EE Estonia EG Egypt EH Western Sahara	ΑZ	Azerbaijan
BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Cristmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BA	Bosnia and
BB Barbados BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Cristmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic CZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		Herzegovina
BD Bangladesh BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BB	
BE Belgium BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BF Burkina Faso BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BG Bulgaria BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BH Bahrain BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BI Burundi BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CY Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BG	
BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BH	Bahrain
BJ Benin BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BI	Burundi
BM Bermuda BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BJ	
BN Brunei Darussalam BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BO Bolivia BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BR Brazil BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BS Bahamas BT Bhutan BV Bouvet Island BW Botswana BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BT Bhutan BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		
BV Bouvet Island BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara		Bahamas
BW Botswana BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Cristmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	ВТ	Bhutan
BY Belarus BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BV	Bouvet Island
BZ Belize CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BW	Botswana
CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	DV	Poloruo
CA Canada CC Cocos (Keeling) Islands CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	ВY	Delalus
CC Cocos (Keeling) Islands  CF Central African Republic  CG Congo  CH Switzerland  CI Côte d'Ivoire  CK Cook Islands  CL Chile  CM Cameroon  CN China  CO Colombia  CR Costa Rica  CU Cuba  CV Cape Verde  CX Christmas Island  CY Cyprus  CZ Czech Republic  DE Germany  DJ Djibouti  DK Denmark  DM Dominica  DO Dominican Republic  DZ Algeria  EC Ecuador  EE Estonia  EG Egypt  EH Western Sahara		
Islands  CF Central African Republic  CG Congo  CH Switzerland  CI Côte d'Ivoire  CK Cook Islands  CL Chile  CM Cameroon  CN China  CO Colombia  CR Costa Rica  CU Cuba  CV Cape Verde  CX Christmas Island  CY Cyprus  CZ Czech Republic  DE Germany  DJ Djibouti  DK Denmark  DM Dominica  DO Dominican Republic  DZ Algeria  EC Ecuador  EE Estonia  EG Egypt  EH Western Sahara	BZ	Belize
CF Central African Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chille CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA	Belize Canada
Republic CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA	Belize Canada Cocos (Keeling)
CG Congo CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC	Belize Canada Cocos (Keeling) Islands
CH Switzerland CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC	Belize Canada Cocos (Keeling) Islands Central African
CI Côte d'Ivoire CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC	Belize Canada Cocos (Keeling) Islands Central African Republic
CK Cook Islands CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC	Belize Canada Cocos (Keeling) Islands Central African Republic
CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF	Belize Canada Cocos (Keeling) Islands Central African Republic Congo
CL Chile CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland
CM Cameroon CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire
CN China CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands
CO Colombia CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile
CR Costa Rica CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon
CU Cuba CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	CA CC CF CG CH CI CK CL CM	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China
CV Cape Verde CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CN CO	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia
CX Christmas Island CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CN CO CR	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica
CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CN CO CR	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica
CY Cyprus CZ Czech Republic DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CN CO CR CU	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba
CZ Czech Republic  DE Germany  DJ Djibouti  DK Denmark  DM Dominica  DO Dominican Republic  DZ Algeria  EC Ecuador  EE Estonia  EG Egypt  EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde
DE Germany DJ Djibouti DK Denmark DM Dominica DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CX	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island
DJ Djibouti  DK Denmark  DM Dominica  DO Dominican Republic  DZ Algeria  EC Ecuador  EE Estonia  EG Egypt  EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CX CY	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus
DK Denmark  DM Dominica  DO Dominican Republic  DZ Algeria  EC Ecuador  EE Estonia  EG Egypt  EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CO CR CO CV CY CZ	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic
DM Dominica  DO Dominican Republic  DZ Algeria  EC Ecuador  EE Estonia  EG Egypt  EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CR CO CC CC CC CC CV CC CX CY CZ DE	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany
DO Dominican Republic DZ Algeria EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CR CCV CV CZ DE DJ	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti
DZ Algeria  EC Ecuador  EE Estonia  EG Egypt  EH Western Sahara	BZ CA CC CF CG CH CCL CM CO CR CU CV CZ CZ DE DJ DK	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark
EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CO CC CO CD	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica
EC Ecuador EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CO CC CO CD	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica
EE Estonia EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CO CO CO CD DD DD DM DD DD	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominican Republic
EG Egypt EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CO CO CO DD DD DD DD CD CD CD CD CD CD CD CD CD	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria
EH Western Sahara	BZ CA CC CF CG CH CI CK CL CM CO CO CR CV CZ DE DJ DK DM DO DZ EC	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador
	BZ CA CC CF CG CH CI CK CL CM CO CR CV CY CZ DE DJ DM DO DZ EC EE	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominica Republic Algeria Ecuador Estonia
EK   Eritrea	BZ CA CC CF CG CH CI CK CL CM CO CR CV CY CZ DE DJ DK DM DO DZ EC EE EG	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominica Republic Algeria Ecuador Estonia Egypt
	BZ CA CC CF CG CH CI CK CL CM CO CR CV CY CZ DE DJ DK DM DO DZ EC EE EG EH	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia Egypt Western Sahara

ES	Spain
	•
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
	(Malvinas)
FM	Micronesia
' '''	
	(Federated States of)
FO	Faroe Islands
FR	France
FX	France, Metropolitan
GA	Gabon
GB	United Kingdom
GD	Grenada
GE	Georgia
GF	French Guiana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe
GQ	Equatorial Guinea
GR	Greece
GS	South Georgia and
	the South Sandwich
	Islands
GT	Guatemala
GU	Guam
GW	Guinea-Bissau
GY	Guyana
HK	Hong Kong
НМ	Heard Island and
	McDonald Islands
LINI	
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
10	British Indian Ocean
	Territory
IQ	Iraq
IR IO	Iran (Islamic Republic of)
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia
KI	Kiribati
KM	Comoros
KN	Saint Kitts and Nevis
KP	Korea, Democratic
	People's Republic of
KR	Korea, Republic of
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Lao People's
	Democratic Republic
LB	Lebanon

LC Saint Lucia	
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libyan Arab
840	Jamahiriya
MA MC	Morocco Monaco
MD	Moldova, Republic of
MG	Madagascar
MH	Marshall Islands
ML	Mali
MM	Myanmar
MN	Mongolia
МО	Macau
MP	Northern Mariana
	Islands
MQ	Martinique
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia
NE	Niger
NF NG	Norfolk Island
NI	Nigeria Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru
PF	French Polynesia
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and
DNI	Miquelon
PN	Pitcairn Puerto Rico
PR PT	
	Portugal
PW PY	Palau Paraguay
QA	Qatar
RE	Réunion
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles

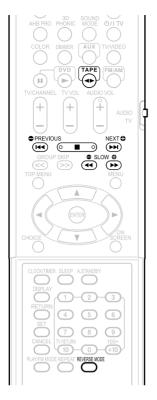
SD	Sudan	
SE	Sweden	
SG	Singapore	
SH	Saint Helena	
SI	Slovenia	
SJ	Svalbard and Jan	
	Mayen	
01/		
SK	Slovakia	
SL	Sierra Leone	
SM	San Marino	
SN	Senegal	
SO	Somalia	
SR	Suriname	
ST	Sao Tome and Principe	
SV	El Salvador	
SY	Syrian Arab Republic	
SZ	Swaziland	
TC	Turks and Caicos	
	Islands	
TD	Chad	
TF	French Southern	
'-		
	Territories	
TG	Togo	
TH	Thailand	
TJ	Tajikistan	
TK	Tokelau	
TM	Turkmenistan	
TN	Tunisia	
TO	Tonga	
TP	East Timor	
TR	Turkey	
TT	Trinidad and Tobago	
	l <del>-</del> .	
TV	Tuvalu	
TW	Taiwan	
	Taiwan Tanzania, United	
TW	Taiwan Tanzania, United Republic of	
TW	Taiwan Tanzania, United	
TW	Taiwan Tanzania, United Republic of	
TW TZ UA UG	Taiwan Tanzania, United Republic of Ukraine Uganda	
TW TZ UA	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor	
TW TZ UA UG UM	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands	
TW TZ UA UG UM	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States	
TW TZ UA UG UM	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay	
TW TZ UA UG UM	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan	
TW TZ  UA UG UM  US UY UZ	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan	
TW TZ UA UG UM US UY	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State	
TW TZ UA UG UM US UY UZ VA	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See)	
TW TZ  UA UG UM  US UY UZ	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the	
TW TZ  UA UG UM  US UY VA  VC	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines	
TW TZ UA UG UM US UY UZ VA	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the	
TW TZ  UA UG UM  US UY VZ  VA  VC	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela	
TW TZ  UA UG UM  US UY VA  VC  VE VG	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British)	
TW TZ  UA UG UM  US UY  VZ  VA  VC  VE VG VI	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.)	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands Uriguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam	
TW TZ  UA UG UM  US UY VA  VC  VE VG VI VN VU	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands Uriguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands Uriguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam	
TW TZ  UA UG UM  US UY VA  VC  VE VG VI VN VU	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands Uriguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VV WF	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF  WS YE	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VV WF	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF  WS YE	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands United States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF  WS YE YT YU	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF  WS YE YT YU ZA	Taiwan Tanzania, United Republic of Ukraine Uganda United States Minor Outlying Islands Uriguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia South Africa	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF  WS YE YT YU ZA ZM	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands Uriguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia South Africa Zambia	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF  WS YE YE YT YU ZA ZM ZR	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands Urigen States Uruguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (British) Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia South Africa Zambia Zaire	
TW TZ  UA UG UM  US UY UZ VA  VC  VE VG VI VN VU WF  WS YE YT YU ZA ZM	Taiwan Tanzania, United Republic of Ukraine Ugand a United States Minor Outlying Islands Uriguay Uzbekistan Vatican City State (Holy See) Saint Vincent and the Grenadines Venezuela Virgin Islands (British) Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia South Africa Zambia	

# **Language Codes**

AA Afar MK Macedonian AB Abkhazian ML Malayalam AF Afrikaans MN Mongolian AM Ameharic MC Moldavian AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovak GA Irish SL Slovak GA Irish SL Slovak HI Hindi SS Siswati HA Hausa SR Serbian HI Hindi SS Siswati HR Hausa SR Serbian HI Hindi SS Siswati HR Hausa SR Serbian HI Hindi SS Siswati HR Tigniya HR Croatian TR Tigniya HR Tigniya HR Tigniya HR Tigniya HR Tigniya HR Croatian TR Tigniya HR Croatian TR Tigniya HR Tigniya HR Croatian TR Tigniya HR Tig	Code	Language	Code	Language
AB Abkhazian ML Malayalam AF Afrikaans MN Mongolian AM Ameharic MO Moldavian AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azebaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EC Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovanian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian TY Seesotho HU Hungarian SU Sundanese HU Hungarian SU Sundanese HY Armenian SV Swedish II Interlingue TA Tamil IK Inupiak TE Elugu IN Indonesian TS Tseogna KK Razakh TO Tonga KK Razakh TO Tonga KK Razakh TO Tonga KK Razakh TO Tonga KK Rasamir UK Ukrainian KK Razakh TO Tonga KK Rasamir UK Ukrainian KK Kazakh TO Tonga KK Kasamir UK Ukrainian KK Kasakh TO Tonga KK Kasamir UK Ukrainian KK Kasakh TO Tonga KK Kasamiri UK Ukrainian KK Kasakh TO Tonga KK Kasamiri UK Ukrainian KK Latin UJ Uzbek LA Latin UJ Uzbek LA Latin UJ Uzbek LA Latin UJ Uzbek MG Malagasy ZU Zulu		0 0		
AF Afrikaans MN Mongolian AM Ameharic MO Moldavian AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Beton PA Panjabi CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frislan SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian TR Tamil IK Inuplak TE Telugu IK Inuplak TE Tel				
AM Ameharic MO Moldavian AR Arabic MR Marathi AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fjij SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian TG Tajik IK Inupiak TE Telugu IK Ukrainian TM Setswana IK Greenlandic TR Turkish IK Ukrainian TM Setswana IK Greenlandic TR Turkish IK Ukrainian TM Setswana IK Greenlandic TR Turkish IK Ukrainian TM Twi IK Seshmiri UK Ukrainian IK Ukrainian TM Twi IK Ukrainian TM Twi IK Seshmiri UK Ukrainian IK Ukrainian TM Twi IK Ukrainian				
AR Arabic AS Assamese AS MS Malay (MAY) AY Aymara BY Maltese BA Bashkir BA Bashkir BB Byelorussian BE Byelorussian BI Bisama BG Bulgarian BI Bislama BC OC Occitan BN Bengali, Bangla BN Bengali, Bangla BN Bereton BN Bereton BN Bengali, Bangla BN Bereton BN Bengali, Bangla BN Bereton BN Bengali, Bangla BN Breton BN Bengali, Bangla BN Breton BN Br				
AS Assamese MS Malay (MAY) AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian TG Tajik IR Indonesian TR Tatar KN Kasamin NG Sesuana KN Kasamin TG Tajik IR Indonesian TG Tajik KN Kannada TT Tatar KN Kannada TT Tatar KN Kannada TT Tatar KN Kannada TT Tatar KN Kinghiz UZ Uzbek LA Latin VI Vetamese				
AY Aymara MT Maltese AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OK (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GL Galician SN Shona GL Galician SN Shona GL Galician SN Shona HI Hindi SS Siswati HR Croatian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahill II Interlingue TA Tamil IIK Inupiak TE Telugu IN Indonesian TS Tsonga KN Karakh TO Tonga KK Azakh TO Tonga KK Azakh TO Tonga KK Azakh TO Tonga KK Kasahmir UK Ukrainian KK Karakh TO Tonga KK Kashmiri UK Ukrainian KK Kasahmir UK Ukrainian KK Lativan, Lettish YO Yoruba				
AZ Azerbaijani MY Burmese BA Bashkir NA Nauru BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GL Galician SN Shona GL Galician SN Shona GL Galician SN Shona GL Galician ST Sesotho HU Hungarian SU Sundanese HH Hindi SS Siswati HR Croatian TG Tajik IR Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TS Tsonga KN Kannada TT Tatar KN Kannada TT Tatar KN Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LU Latin VI Vietnamese LU Russian LI Lithuan Latelish VO Volapuk KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LU Lativan, Lettish YO Voruba MG Malagasy ZU Zulu				
BA Bashkir BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fjij SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IK Inupiak TE Telugu IK Ukrainian				
BE Byelorussian NE Nepali BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CO Corsican PS Pashto, Pushto CO Corsican PS Pa				
BG Bulgarian NL Dutch BH Bihari NO Norwegian BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SV Swedish HR Croatian SV Swedish IA Interlingue TA Tamil IK Inupiak TE Telugu IK Indiva Serbora KM Ramelon KM Rinyarwanda EI Basque SA Sanskrit FO Faroese SI Singhalese FY Frisian SK Slovak GL Galician SN Shona GL Galician SN Shona GL Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Swedish IA Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Celandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kashmiri UK Ukrainian KU Kurdish UR Urdu KK Kashmiri UK Ukrainian KU Kurdish UR Urdu KK Kirphiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba				
BH Bihari Bislama OC Occitan BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EU Basque SA Sanskrit FA Persian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IIA Interlingue TA Tamil IIK Inupiak TE Telugu IN Indonesian TR Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KS KSASanya KU Kurdish UR Urdu KS KSASanya KU Kurdish UR Urdu KS KSASANA KU Kurdish UR Urdu KS KSASANA KU Kurdish UR Urdu KS KSASANA KU Kurdish UR Urdu KK Kashmiri UK Ukrainian KU Kurdish UR Urdu KK Kirphiz UZ Uzbek LA Latin VI Vietnamese LV Latvian, Lettish VO Yoruba MG Malagasy ZU Zulu				
BI Bislama OC Occitan BN Bengali, Bangla OM (Afan) Oromo BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IN Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
BN         Bengali, Bangla         OM         (Afan) Oromo           BO         Tibetan         OR         Oriya           BR         Breton         PA         Panjabi           CA         Catalan         PL         Polish           CO         Corsican         PS         Pashto, Pushto           CS         Czech         PT         Portuguese           CY         Welsh         QU         Quechua           DA         Danish         RM         Rhaeto-Romance           CY         Welsh         QU         Quechua           DA         Sanish         R         Ramanian           EU         Basque         SA         Sanskrit           FA         Persian         SD         Sindhi           FI         Finish				
BO Tibetan OR Oriya BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian SY Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajjik IN Indonesian TG Tajjik IN Indonesian TG Tajjik KA Georgian KK Kazakh TO Tonga KK Rashmiri KU Kurdish UR Urdu KK Karahiri UK Ukrainian KU Kurdish UR Urdu KK Kirghiz UZ Uzbek LA Latin VI Vietnamese LA Latin VI Vietnamese LA Latin VI Vietnamese LA Latin VI Vietnamese LA Latin W Noroub MG Malagasy ZU Zulu				
BR Breton PA Panjabi CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RW Kinyarwanda ET Estonian RW Kinyarwanda ET Estonian RW Kinyarwanda ET Estonian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SW Swedish IA Interlingua SW Swedish II Interlingue TA Tamil IIK Inupiak TE Telugu IIN Indonesian TG Tajik KA Georgian TN Setswana KK Kazakh TO Tonga KK Rashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
CA Catalan PL Polish CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajjik IS Icelandic TH Thai IK Inupiak TE Telugu IN Indonesian TG Tajjik IS Icelandic TH Thai IW Hebrew TI Tigrinya JJ Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Karakh TO Tonga				
CO Corsican PS Pashto, Pushto CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak SA Irish SL Slovenian GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HA Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingua TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik Seronga IT Sesonga KK Samana KK Kazakh TO Tonga KK Gambar Seronga TT Tatar KK Cambar Seronga TT Tatar KK Cambar Seronga IV Surdanese KK Kazakh TO Tonga KK Sashmiri UK Ukrainian IK Gerenlandic TR Turkish KK Cambodian TS Tajik IT Tatar KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kasakh TO Tonga KK Kannada TT Tatar KK Cambodian TS Tajik IT Turkish KK Cambodian TS Tajik IV Ukrainian IV Ukrainian IV Ukurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese UK Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
CS Czech PT Portuguese CY Welsh QU Quechua DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingua TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala WO Volapuk LO Laothian KH Xhosa LL Latina LL XL				
CY Welsh QU Quechua  DA Danish RM Rhaeto-Romance  DZ Bhutani RN Kirundi  EL Greek RO Rumanian  EO Esperanto RU Russian  ET Estonian RW Kinyarwanda  EU Basque SA Sanskrit  FA Persian SD Sindhi  FI Finnish SG Sangho  FJ Fiji SH Serbo-Croatian  FO Faroese SI Singhalese  FY Frisian SK Slovak  GA Irish SL Slovenian  GD Scots Gaelic SM Samoan  GL Galician SN Shona  GN Guarani SO Somali  GU Gujarati SQ Albanian  HA Hausa SR Serbian  HI Hindi SS Siswati  HR Croatian ST Sesotho  HU Hungarian SU Sundanese  HY Armenian SV Swedish  IA Interlingua SW Swahili  IE Interlingua TA Tamil  IK Inupiak TE Telugu  IN Indonesian TG Tajik  IS Icelandic TH Thai  IW Hebrew TI Tigrinya  JI Yiddish TK Turkmen  JW Javanese TL Tagalog  KA Georgian TN Setswana  KK Kazakh TO Tonga  KK Kannada TT Tatar  KO Korean (KOR) TW Twi  KS Kashmiri UK Ukrainian  KU Kurdish UR Urdu  KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu				
DA Danish RM Rhaeto-Romance DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk KO Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu		Welsh		
DZ Bhutani RN Kirundi EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IIK Inupiak TE Telugu IIN Indonesian TG Tajik IIS Icelandic TH Thai IIW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk KO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
EL Greek RO Rumanian EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajjik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk MG Malagasy ZU Zulu				
EO Esperanto RU Russian ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
ET Estonian RW Kinyarwanda EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Gashmiri UK Ukrainian KK Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu			_	
EU Basque SA Sanskrit FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
FA Persian SD Sindhi FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajjik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
FI Finnish SG Sangho FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	_			
FJ Fiji SH Serbo-Croatian FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
FO Faroese SI Singhalese FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
FY Frisian SK Slovak GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
GA Irish SL Slovenian GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu			SK	
GD Scots Gaelic SM Samoan GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KK Gambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
GL Galician SN Shona GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
GN Guarani SO Somali GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				Shona
GU Gujarati SQ Albanian HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	GN			
HA Hausa SR Serbian HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
HI Hindi SS Siswati HR Croatian ST Sesotho HU Hungarian SU Sundanese HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
HU       Hungarian       SU       Sundanese         HY       Armenian       SV       Swedish         IA       Interlingua       SW       Swahili         IE       Interlingue       TA       Tamil         IK       Inupiak       TE       Telugu         IN       Indonesian       TG       Tajik         IS       Icelandic       TH       Thai         IW       Hebrew       TI       Tigrinya         JI       Yiddish       TK       Turkmen         JW       Javanese       TL       Tagalog         KA       Georgian       TN       Setswana         KK       Kazakh       TO       Tonga         KL       Greenlandic       TR       Turkish         KM       Cambodian       TS       Tsonga         KN       Kannada       TT       Tatar         KO       Korean (KOR)       TW       Twi         KS       Kashmiri       UK       Ukrainian         KU       Kurdish       UR       Urdu         KY       Kirghiz       UZ       Uzbek         LA       Latin       VI       Vietnamese		Hindi		
HY Armenian SV Swedish IA Interlingua SW Swahili IE Interlingue TA Tamil IK Inupiak TE Telugu IN Indonesian TG Tajik IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	HR	Croatian	ST	Sesotho
IA       Interlingua       SW       Swahili         IE       Interlingue       TA       Tamil         IK       Inupiak       TE       Telugu         IN       Indonesian       TG       Tajik         IS       Icelandic       TH       Thai         IW       Hebrew       TI       Tigrinya         JI       Yiddish       TK       Turkmen         JW       Javanese       TL       Tagalog         KA       Georgian       TN       Setswana         KK       Kazakh       TO       Tonga         KL       Greenlandic       TR       Turkish         KM       Cambodian       TS       Tsonga         KN       Kannada       TT       Tatar         KO       Korean (KOR)       TW       Twi         KS       Kashmiri       UK       Ukrainian         KU       Kurdish       UR       Urdu         KY       Kirghiz       UZ       Uzbek         LA       Latin       VI       Vietnamese         LN       Lingala       VO       Volapuk         LO       Laothian       WO       Wolof <tr< td=""><td>HU</td><td>Hungarian</td><td>SU</td><td>Sundanese</td></tr<>	HU	Hungarian	SU	Sundanese
IA       Interlingua       SW       Swahili         IE       Interlingue       TA       Tamil         IK       Inupiak       TE       Telugu         IN       Indonesian       TG       Tajik         IS       Icelandic       TH       Thai         IW       Hebrew       TI       Tigrinya         JI       Yiddish       TK       Turkmen         JW       Javanese       TL       Tagalog         KA       Georgian       TN       Setswana         KK       Kazakh       TO       Tonga         KL       Greenlandic       TR       Turkish         KM       Cambodian       TS       Tsonga         KN       Kannada       TT       Tatar         KO       Korean (KOR)       TW       Twi         KS       Kashmiri       UK       Ukrainian         KU       Kurdish       UR       Urdu         KY       Kirghiz       UZ       Uzbek         LA       Latin       VI       Vietnamese         LN       Lingala       VO       Volapuk         LO       Laothian       WO       Wolof <tr< td=""><td>HY</td><td>Armenian</td><td>SV</td><td>Swedish</td></tr<>	HY	Armenian	SV	Swedish
IK     Inupiak     TE     Telugu       IN     Indonesian     TG     Tajik       IS     Icelandic     TH     Thai       IW     Hebrew     TI     Tigrinya       JI     Yiddish     TK     Turkmen       JW     Javanese     TL     Tagalog       KA     Georgian     TN     Setswana       KK     Kazakh     TO     Tonga       KL     Greenlandic     TR     Turkish       KM     Cambodian     TS     Tsonga       KN     Kannada     TT     Tatar       KO     Korean (KOR)     TW     Twi       KS     Kashmiri     UK     Ukrainian       KU     Kurdish     UR     Urdu       KY     Kirghiz     UZ     Uzbek       LA     Latin     VI     Vietnamese       LN     Lingala     VO     Volapuk       LO     Laothian     WO     Wolof       LT     Lithuanian     XH     Xhosa       LV     Latvian, Lettish     YO     Yoruba       MG     Malagasy     ZU     Zulu	IΑ	Interlingua		Swahili
IK     Inupiak     TE     Telugu       IN     Indonesian     TG     Tajik       IS     Icelandic     TH     Thai       IW     Hebrew     TI     Tigrinya       JI     Yiddish     TK     Turkmen       JW     Javanese     TL     Tagalog       KA     Georgian     TN     Setswana       KK     Kazakh     TO     Tonga       KL     Greenlandic     TR     Turkish       KM     Cambodian     TS     Tsonga       KN     Kannada     TT     Tatar       KO     Korean (KOR)     TW     Twi       KS     Kashmiri     UK     Ukrainian       KU     Kurdish     UR     Urdu       KY     Kirghiz     UZ     Uzbek       LA     Latin     VI     Vietnamese       LN     Lingala     VO     Volapuk       LO     Laothian     WO     Wolof       LT     Lithuanian     XH     Xhosa       LV     Latvian, Lettish     YO     Yoruba       MG     Malagasy     ZU     Zulu	ΙE	Interlingue	TA	Tamil
IS Icelandic TH Thai  IW Hebrew TI Tigrinya  JI Yiddish TK Turkmen  JW Javanese TL Tagalog  KA Georgian TN Setswana  KK Kazakh TO Tonga  KL Greenlandic TR Turkish  KM Cambodian TS Tsonga  KN Kannada TT Tatar  KO Korean (KOR) TW Twi  KS Kashmiri UK Ukrainian  KU Kurdish UR Urdu  KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu	IK	Inupiak	TE	Telugu
IS Icelandic TH Thai IW Hebrew TI Tigrinya JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	IN	Indonesian	TG	
JI Yiddish TK Turkmen JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu		Icelandic	TH	
JW Javanese TL Tagalog KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu	IW			, ,
KA Georgian TN Setswana KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu			TK	
KK Kazakh TO Tonga KL Greenlandic TR Turkish KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu			TL	
KL     Greenlandic     TR     Turkish       KM     Cambodian     TS     Tsonga       KN     Kannada     TT     Tatar       KO     Korean (KOR)     TW     Twi       KS     Kashmiri     UK     Ukrainian       KU     Kurdish     UR     Urdu       KY     Kirghiz     UZ     Uzbek       LA     Latin     VI     Vietnamese       LN     Lingala     VO     Volapuk       LO     Laothian     WO     Wolof       LT     Lithuanian     XH     Xhosa       LV     Latvian, Lettish     YO     Yoruba       MG     Malagasy     ZU     Zulu				
KM Cambodian TS Tsonga KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
KN Kannada TT Tatar KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
KO Korean (KOR) TW Twi KS Kashmiri UK Ukrainian KU Kurdish UR Urdu KY Kirghiz UZ Uzbek LA Latin VI Vietnamese LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu		Cambodian		Tsonga
KS Kashmiri UK Ukrainian  KU Kurdish UR Urdu  KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu				
KU     Kurdish     UR     Urdu       KY     Kirghiz     UZ     Uzbek       LA     Latin     VI     Vietnamese       LN     Lingala     VO     Volapuk       LO     Laothian     WO     Wolof       LT     Lithuanian     XH     Xhosa       LV     Latvian, Lettish     YO     Yoruba       MG     Malagasy     ZU     Zulu				
KY Kirghiz UZ Uzbek  LA Latin VI Vietnamese  LN Lingala VO Volapuk  LO Laothian WO Wolof  LT Lithuanian XH Xhosa  LV Latvian, Lettish YO Yoruba  MG Malagasy ZU Zulu				
LA     Latin     VI     Vietnamese       LN     Lingala     VO     Volapuk       LO     Laothian     WO     Wolof       LT     Lithuanian     XH     Xhosa       LV     Latvian, Lettish     YO     Yoruba       MG     Malagasy     ZU     Zulu				
LN Lingala VO Volapuk LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
LO Laothian WO Wolof LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				Vietnamese
LT Lithuanian XH Xhosa LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
LV Latvian, Lettish YO Yoruba MG Malagasy ZU Zulu				
MG Malagasy ZU Zulu				
MI Maori			ZU	Zulu
	MI	Maori	_	

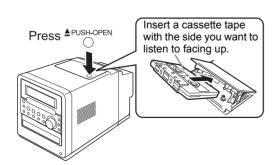
Used frequently

# **Listening to Cassette Tapes**



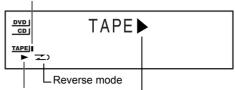
	Operation
Stop	Press ••.
Fast forward/ Rewind	Press PREVIOUS  • When a cassette tape is played back in the normal direction (►), PREVIOUS  • When the cassette tape is played back in the opposite direction (◄),  • When the cassette tape is played back in the opposite direction (◄),  • PREVIOUS  • IS fast forward and PREVIOUS  • IS fast forward and PREVIOUS  • SLOW OF SL

## 1 Insert a cassette tape.



#### Cassette tape indicator

(The cassette tape indicator lights up while the cassette tape is stopped. The cassette tape indicator flashes while the cassette tape is being played back.)



Cassette tape playback direction (►: normal direction/◄: opposite direction)

#### CAUTION

- Do not use long cassette tapes such as C-120 or C-150. Long cassette tapes are thin and stretch easily, and may become tangled in the inner part of the main unit.
- This product is compatible with playback of TYPE I cassette tapes. Playback of TYPE II or TYPE IV cassette tapes is not recommended, because this product does not meet the specifications for these tapes. The main unit does not produce the proper sound from these cassette tape types.

# 2 Press repeatedly to select the reverse mode.

: For one return playback of both sides.

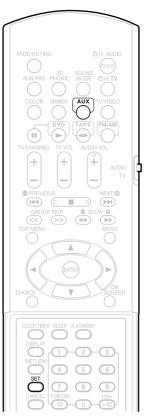
: For repeated playback of both sides (Playback continues until playback is stopped.)

: For one-way playback of either side.

# 3 Press (TAPE).

- · Playback starts.
- When the main unit is turned off, pressing automatically turns on the main unit.
- Each time you press , the cassette tape playback direction changes. The initial playback direction after you have inserted a cassette tape is always the normal direction.
- The cassette tape playback direction indicator facing right 
   is displayed during normal playback. The indicator facing left 
   is displayed during reverse playback.

# **Listening to Other Equipment**



1 Press O.



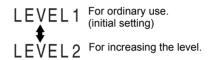
- 2 Start other equipment playback.
  - Refer to the operation manual for the connected equipment.
- Adjust the volume and make other necessary settings.
   For adjusting the volume and making other
  - For adjusting the volume and making other necessary settings, refer to "Basic Operations" ( page 17).

# Adjusting the Sound Input Level from Other Equipment

Adjusting the sound input level of the AUX

- 1 Press O.
- Hold down 

  in until the input level appears.
  - Each time you hold down  $\stackrel{\text{\tiny SET}}{\bigcirc}$ , the display toggles as follows.



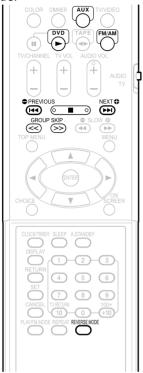
# **Recording Sound to Cassette Tapes**

Used frequently

Main unit



Remote control



#### NOTE

- The sound input level during recording is automatically adjusted.
- When you record tracks from a disc, a 4-second blank is inserted between tracks in the recording. You can record tracks with no blank time.

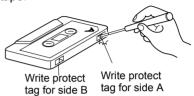
( page 45)

#### **CAUTION**

- It may be unlawful to record or playback copyright material without the consent of the copyright owner.
- Do not use long cassette tapes such as C-120 or C-150. Long cassette tapes are thin and stretch easily, and may become tangled in the inner part of the main unit.
- Since this product is not compatible with TYPE II and TYPE IV cassette tapes, do not use these types of cassette tapes. This product does not meet the specifications for these tapes, so sound is not properly recorded to these types of cassette tapes. You cannot obtain proper playback sound.

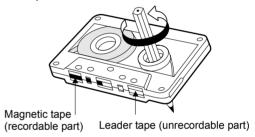
# Preventing recorded sound from being erased

- Write protect tags are attached to a cassette tape for preventing the erasing of recorded sound. They enable you to avoid losing important recordings because once you snap off the write protect tags, you cannot record to the cassette tape or erase recorded material.
- When you want to use the cassette tape for recording again, cover the tag holes with adhesive tape.



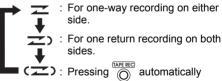
# 1 Insert a cassette tape for recording.

 Before inserting the cassette tape, wind the tape past the leader part of the cassette tape.



# 2 Press to select the reverse mode.

• Each time you press heres time, the display toggles as follows.



Pressing automatically starts one return recording on both sides.

 You can change the reverse mode during recording.

### 3 Select a sound source for recording.

Sound source	Operation
Disc	Press , and then press . (The disc is stopped.)
Radio broadcast	Select the radio station whose broadcast you want to record ( T page 19).
Sound from other equipment (AUX)	Press and prepare playback on the other equipment (  page 43).

# 4 Press $\bigcirc$ on the main unit.

Example: Display while CD sound is recorded



- When you record from a disc, all tracks are recorded to the cassette tape.
- When you want to record sound from other equipment, start playback on the connected equipment.
- When recording finishes, the color pattern of the display window and disc tray switches to the color pattern set in "MANUAL" to inform you that recording has finished ( page page 18).

## **Quitting Recording**

Press • •.

# Recording Only One Track from a Disc

(Excluding DVD VIDEOs)

Before proceeding to step 4, play back the track you want to record.

Pressing in step 4 returns playback to the beginning of the track and only that track is recorded.

### Recording the Second or Subsequent Track to the Last Track from a Disc

(For a DVD VIDEO: while the disc is paused)

■For a CD/VCD/SVCD/DVD VIDEO

Before proceeding to step 4, select the starting track/chapter number by

pressing Previous or PREVIOUS or PREVIOUS.

■For a DVD AUDIO/MP3/WMA

Before proceeding to step 4, select the group number by pressing or and then select the track number by pressing PREVIOUS or P

# Program Recording from a Disc

Before proceeding to step 4, program the tracks you want to record (

# Recording with No Blank Time between Tracks

Before proceeding to step 4, play back a disc, pause the playback, and then press for to return to the beginning of the first track.

# **Erasing Recorded Sound from a Cassette Tape**

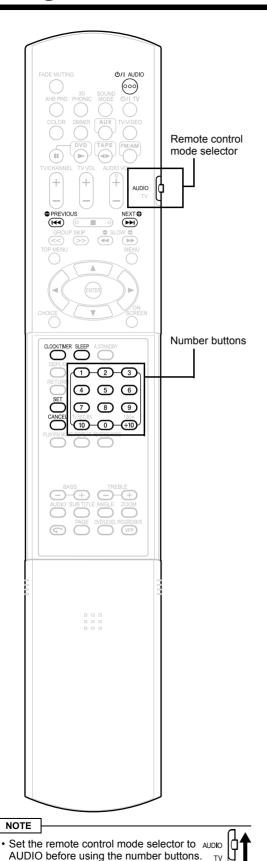
Select the sound from other equipment (AUX) in step 3, and then press

TAPE REC

 Do not play back any tracks on the connected equipment.

#### NOTE

• If the cassette tape reverses direction while a track is being recorded from a disc, this product starts recording that track again from the beginning onto the reverse side of the cassette tape. However, if 12 or less seconds of that track were recorded onto the first side of the cassette tape, recording to the reverse side of the cassette tape starts from the beginning of the previous track.



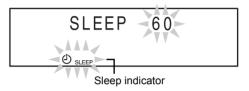
# **Sleep Timer**

When the specified time passes, the main unit automatically turns off.

# Press .

• Each time you press  $\stackrel{\text{\tiny SLEEP}}{\bigcirc}$ , the time display (in minutes) toggles as follows.

Example: Display while the sleep timer is set to 60 minutes



#### NOTE

- When you set the sleep timer, the display window automatically dims.
- Before the clock has been set (While "0:00" is flashing), when you press , "CLOCK ADJUST!" appears.

# Changing the sleep timer setting

- $\bullet$  Press  $\stackrel{\text{\tiny SLEEP}}{\bigodot}$  repeatedly to select the time again.
- Confirming the sleep timer setting (remaining time)
- With the sleep timer activated, press once.

# **Recording Timer**

You can use the recording timer function to record FM/AM broadcasts or sound from other equipment to cassette tape.

You can enter up to three timer settings in total for the recording timer and the playback timer ( Propage 48).

#### NOTE

• Timer settings remain unchanged until the timer is replaced by new setting.

### 1 Prepare the sound source.

Radio	Preset the radio station whose broadcast you want to record.  ( Page page 20)
Other equipment	Follow the operation manual for the equipment.

- 2 Insert a cassette tape. ( page 42)
- 3 Press repeatedly to select "TIMER1", "TIMER2" or "TIMER3".

Example: When "TIMER1" is selected



- 4 Press .
- Fress ♣PREVIOUS, NEXT ⊕ or ☐ to set the starting time and ending time.

Example:To set the recording time from 6:30 a.m. to 6:45 a.m.

- You can use the number buttons to set the recording time. Refer to "Using the number buttons" ( page 16).
- For setting the clock, refer to "Setting the Clock" ( page 16).

Entering the "hour"  $\to \stackrel{\text{SET}}{\longrightarrow} \to$  Entering the "minute"  $\to \stackrel{\text{SET}}{\longrightarrow}$ 

6 Press ♣PREVIOUS or ♠PREVIOUS 
ONCE: The recording timer works

once.

EVERYDAY: The recording timer works

every day.

- 7 Press  $\stackrel{\text{SET}}{\bigcirc}$ .
- 8 Press PREVIOUS or FIT to select "REC TIMER".
  - "REC" stands for "Recording".
- 9 Press .
- 10 Press errevious or properties to select a sound source.

Example: To record an FM broadcast to a cassette tape



- When you want to record sound from other equipment, you cannot use the recording timer function to start playback on any equipment other than this product.
- ■When you want to record an FM/AM radio broadcast
  - Press , and then press , NEXT or the number buttons to select the preset number of the radio station whose broadcast you want to record. Refer to "Using the number buttons" ( ) page 16).
- 11 Press  $\stackrel{\text{SET}}{\bigcirc}$ .
  - The settings appear in the display window.
     Confirm the settings.
- **12** When the main unit is on, press

SEE YOU

- While the recording timer is functioning, the volume is set to "0" and no sound is produced from the speakers or headphones.
- The recording timer is available only when the main unit is turned off.

#### NOTE

 During operation, you can return to the previous step by pressing CANCEL. You can quit the recording timer settings by pressing CANCELLER. The settings are not stored.

# Canceling the recording timer

In step 2 on page 47, select the timer number you want to cancel, and then press on the cancel.

Even when you cancel the recording timer, the setting remains stored.

# Activating the recording timer again

In step 2 on page 47, select the timer number you want to activate, and then press repeatedly until all of the setting procedure finishes. Then turn off the main unit.

### NOTE

- When you want to activate two or three recording timers, leave a blank time of 2 or more minutes between the ending time of the first recording timer and the starting time of the second recording timer. If the blank time is less than 2 minutes, the second recording timer does not work.
- When the power plug is disconnected or the power is cut, the recording timer settings may be lost. If the settings are lost, set the clock and recording timer again.

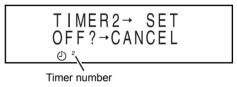
## **Playback Timer**

# 1 Prepare the sound source you want to play back.

Disc	Make sure that a disc is loaded. (■ page 21)	
Cassette tape	Insert a cassette tape. ( Page 42)	
Radio Preset the radio station whose broad you want to listen to. ( Propage 20		
Other equipment		

# 2 Press repeatedly to select "TIMER1", "TIMER2" or "TIMER3".

Example: When "TIMER2" is selected



- **3** Press  $\stackrel{\text{SET}}{\bigcirc}$ .
- 4 Press PREVIOUS, NEXT OF OT to set the starting time and ending time.

Example: When you want to set the playback time from 7:00 a.m. to 7:30 a.m.

- You can use the number buttons to set the playback time. Refer to "Using the number buttons" (ISS page 16).
- For setting the clock, refer to "Setting the Clock" (page 16).

Entering the "hour"  $\to \stackrel{\mathbb{SET}}{\longrightarrow} \to$  Entering the "minute"  $\to \stackrel{\mathbb{SET}}{\longrightarrow}$ 

Press ♣PREVIOUS or ♠PREVIOUS o

ONCE : The playback timer works once. EVERYDAY : The playback timer works every day

6 Press .

7 Press PREVIOUS or PRINT to select "PLAY TIMER".

(Continued on next page)

8 Press .

9 Press PREVIOUS or to select the sound source you want to play back.

Example: When you want to listen to an AM broadcast



- When you want to listen to sound from other equipment, you cannot use the playback timer function to start playback on any equipment other than this product.
- You cannot use the playback timer function together with program playback, repeat playback or random playback of a disc.
- When you want to listen to an FM/AM radio broadcast
  - (With "FM" or "AM" selected) Press ☐, and then press ☐, PREVIOUS, NEXT ☐ or the number buttons to select the preset number of the radio station whose broadcast you want to listen to (□ page 20). Refer to "Using the number buttons" (□ page 16).
- ■When you want to play back a DVD VIDEO or DVD AUDIO
  - (With "DVD/CD" selected) Press twice. Regardless of the displayed numbers of group (G) and track (T), you can play back a DVD VIDEO or DVD AUDIO only from the beginning of the disc.
- ■When you want to play back a CD, VCD or SVCD
  - (With "DVD/CD" selected) Press twice, and then press PREVIOUS, NEXT or the number buttons to select the number of a track (T) from which you want to start playback. Refer to "Using the number buttons" (Propage 16). The group number (G) is ignored.
- When you want to specify a track from which you want to start playback on an MP3 or WMA
  - (With "DVD/CD" selected) Press , press , press , press , press , press or the number buttons to select the group number (G) to be played back, press , and then press , press or the number buttons to select the track number (T) to be played back. Refer to "Using the number buttons" (press page 16).

- 10 Press .
- 11 Press ⊕PREVIOUS or NEXT to adjust the playback volume.
- **12** Press  $\stackrel{\text{\tiny SET}}{\bigcirc}$ .
  - The settings appear in the display window.
- 13 When the main unit is turned on,

press on to turn off the main unit.

SEE	YOU
<u>ئ</u> 2	

 The playback timer is available only when the main unit is turned off.

#### NOTE

- During operation, you can return to the previous step by pressing CANCEL. You can quit the playback timer settings by pressing CANCELTIMER. The settings are not stored.
- When the playback timer starts, the volume gradually increases to the selected level.

# Canceling the playback timer function

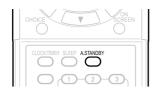
In step 2 on page 48, select the timer number you want to cancel, and then press  $\bigcirc^{\text{CANCEL}}$ . Even when you cancel the playback timer, the setting remains stored.

# Activating the playback timer again

In step 2 on page 48, select the timer number you want to activate, and then press repeatedly until all of the setting procedure finishes. Then turn off the main unit.

- When you want to activate two or three playback timers, leave a blank time of 2 or more minutes between the ending time of the first playback timer and the starting time of the second playback timer. If the blank time is less than 2 minutes, the second playback timer does not work.
- When the power plug is disconnected or the power is cut, the playback timer settings may be lost. If the settings are lost, set the clock and playback timer again.
- When you operate the playback timer with a DVD VIDEO, DVD AUDIO or VCD, sound and video may not be played back automatically. A DVD VIDEO, DVD AUDIO or VCD may contain a disc menu that appears first when played back. Sound or video will not come out before you select the desired item to be played back on the disc menu.

# **Auto Standby**



If no sound is produced for 3 minutes when the disc or cassette tape is selected as a sound source, the main unit automatically turns off.

■When the disc or cassette tape is selected as a sound source

Press A.STANDBY.

"A. STANDBY" stands for "Auto Standby".



# Auto standby performance

When playback or recording finishes, auto standby starts the countdown (the "A. STANDBY" indicator flashes). When no operation is carried out within 3 minutes, the main unit automatically turns off. When you start playback or recording within 3 minutes, auto standby starts the countdown again after playback or recording finishes.

When an operation other than playback and recording finishes and no operation is carried out within 3 minutes, the main unit automatically turns off.

"A. STANDBY OFF" indicator starts to flash 20 seconds before the main unit is to turn off.

# Canceling auto standby

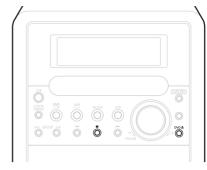
Press once again.

A. STANDBY CANCEL

### NOTE

Leaving the volume at "0" is not the same as producing no sound, and therefore does not start the auto standby function.

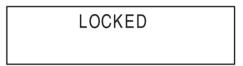
# **Disc Ejection Lock**



You can prohibit ejection of a disc.

■When the main unit is turned off

While holding down o, press on the main unit.



Even if you press , "LOCKED" appears in the display window and the disc does not come out. In addition, when you press , while the main unit is turned off, "LOCKED" appears in the display window and the main unit does not turn on.

# Canceling the disc ejection lock

■When the main unit is turned off Carry out the operation explained above once again.

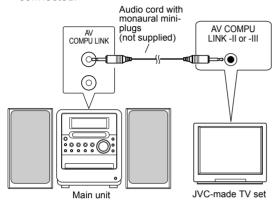
UNLOCKED

# **Using AV COMPU LINK**

The JVC AV COMPU LINK system allows you to enjoy video or audio with the simplest operation. If your JVC TV set supports the JVC AV COMPU LINK system, simply starting the main unit will automatically make all necessary settings on the TV to allow you to enjoy the playback.

### **Connection and Setting**

 Carefully read manuals of equipment to be connected.



Set the main unit's AV COMPU LINK MODE setting ( page 39) as follows.

- When connecting to the VIDEO-1 input terminal of the TV: DVD 2
- When connecting to the VIDEO-2 input terminal of the TV: DVD 3
- When connecting to the VIDEO-3 input terminal of the TV: DVD 1

### **Operations**

You can enjoy sound or video simply by starting playback on the main unit. You do not have to select the input setting for the TV, or turn on the TV beforehand.

- 1 Turn on the main power to the TV.
- 2 Insert a disc into the main unit.
- 3 Press on the main unit.

The following operation is performed automatically.

- The TV set will be turned on.
- TV input will be switched to external input (Video 1, 2 or 3) of the main unit.

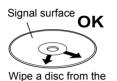
When you turn off the main unit, power to the TV is not turned off.

# **Handling Discs/Cassette Tapes**

### Handling discs

- Do not put adhesive tape or stickers, or write on a disc.
- · Do not bend a disc.
- Be sure not to use heart/flower shaped discs or other irregularly shaped discs. The use of such discs damages the main unit.

# Cleaning discs



center outward with a

soft cloth.



Scratches concentrated on a certain part cause sound dropout.

0

• Be sure not to use thinners, benzenes, cleaners for analog records, or other chemical agents.

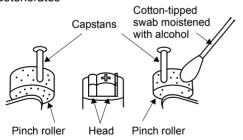
# Handling cassette tapes

• A slack tape may become caught in the inner part of the main unit and damage the main unit.

Before using a cassette tape, wind up any slack in the cassette tape as shown on the right. Do not pull out the tape or touch the tape's surface.

## Cleaning the tape deck head

 Clean the head, pinch rollers and capstans approximately every 10 hours of playback time before the volume falls or sound quality deteriorates



### Cleaning the main unit cabinet

- Gently dust the cabinet surface with a soft dry cloth. When the cabinet is very dirty, dampen the cloth with a neutral detergent diluted with water, wring out the cloth well, and then wipe the cabinet with the dampened cloth followed by a soft dry cloth.
- Do not wipe the cabinet with thinners or benzenes. Wiping it with these agents may cause discoloration of the cabinet or removal of the paint. Do not spray insecticides or other highly volatile agents onto the cabinet. Do not leave pieces of rubber or plastic on the cabinet for a long period.

# **Disc Messages**

Disc message	Meaning	Possible solution	
CANNOT PLAY  You are trying to play back an unplayable disc or a disc that has many scratches.  Replace the disc.		Replace the disc.	
NO DISC	No disc is loaded.	-	
NO AUDIO	The disc may be an illegally copied disc.	You cannot listen to the disc.	
LR ONLY	You are playing back a multi-channel track for which down-mix is prohibited.	This is normal operation.	

# **Troubleshooting**

Problem	Possible cause	Possible solution	Reference page
No sound/video is	Improper connection.	Connect all cords properly.	11-15
produced.	Headphones are connected.	Disconnect the headphone plug.	8
The clock display is flashing.	A power failure occured or the power plug was disconnected.	Reset the clock.	16
Disc playback does not	The disc is upside down.	Place the disc on the disc tray with the letter-printed surface facing up.	21
Disc playback does not start.	Moisture has condensed on the lens.	Leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.	3
A certain point cannot be played back properly.	The disc is scratched or dirty.	Clean or replace the disc.	52
The volume of cassette tape playback is low.	The head or capstans are dirty.	Clean the head or capstans.	52
You cannot record a cassette tape.	The cassette tape is write-protected.	Cancel the write-protection.	44
A radio broadcast cannot be received.	No antenna is connected.	Connect an antenna.	11, 12
A whirring noise is produced.  The main unit is located close to a TV, computer, or other electric appliance.		Place the main unit away from a TV, computer, or other electric appliance.	3
You cannot set the timer.	You did not set the clock.	Set the clock.	16
The timer does not work.	The main unit is turned on.	After setting the timer, turn off the main unit.	47, 49
You cannot operate the remote control.	The remote control batteries are running low.	Replace the batteries with new batteries.	9
You cannot operate the main unit with the number buttons on the remote control.	The remote control mode selector on the remote control is set to TV.	Set the remote control mode selector to AUDIO.	16
When you turn on the main unit, a noise comes out from the rear of the main unit.	The internal cooling fan produces the noise as it rotates.	The noise is not a malfunction. This is to prevent excessive heat.	13, 17

# • If this product does not function properly even after you have implemented the possible solutions given above

Many functions of this product are implemented by microcomputers. If malfunction is caused by thunder or static electricity, or the main unit does not function properly even when you press a button, disconnect the power plug from the AC outlet, wait for a while, and then connect this product again. Then reset the clock.

# **Specifications**

### ■DVD receiver (CA-UXQD9S)

### **Amplifier**

Output power 20 W + 20 W at 4  $\Omega$ 

(10% THD)

Input terminals

<Analog> AUX×1,

500 mV/47 kΩ:LEVEL1

250 mV/47 kΩ:LEVEL2

Output terminals

<Analog> Speaker×1, 20 W/4  $\Omega$ 

Impedance 4  $\Omega$  - 16  $\Omega$ 

Headphone (×1), 25 mW/32  $\Omega$ 

 $\begin{array}{c} \text{Impedance 16 } \Omega \text{ - 1 k} \Omega \\ \text{<Digital>} \quad \text{DVD/CD optical input x 1} \end{array}$ 

-23 dBm to -15 dBm

(Optical square terminal)

<Other> AV COMPU LINK × 2 (φ 3.5)

### Tuner

Frequency FM:87.50 MHz - 108.00 MHz

AM:531 kHz - 1 710 kHz (9 kHz spacing)

530 kHz - 1 710 kHz (10 kHz spacing)

### DVD player

Playable discs DVD VIDEO, DVD AUDIO,

CD, VCD, SVCD, CD-R/CD-RW (CD, VCD, SVCD, MP3/WMA/JPEG format), DVD-R/DVD-RW (video format)

### Cassette deck

Frequency response

Normal (type I) 60 Hz - 14 000 Hz Wow and flutter 0.15% (WRMS)

### General

Power requirement AC 230 V $\sim$ , 50/60 Hz Power consumption 70 W (at operation)

1.3 W (on standby)

Dimensions 165 mm (W) × 200 mm (H)

× 355 mm (D)

Mass (approx.) 4.6 kg

### ■Speaker (SP-UXQD9S)

System 3-way bass reflex type,

Magnetically shielded type

Speakers Woofer: 10 cm × 1

Midrange: 4 cm × 1

Tweeter: 1.5 cm × 1

Powerhandling 20 W

capacity Impedance 4  $\Omega$ 

Frequency range 55 Hz - 40 kHz Sound pressure 85 dB/W•m

level

Dimensions 140 mm (W) × 231 mm (H)

× 204.5 mm (D)

Mass (approx.) 2.2 kg (1 unit)

# ■Micro component system (UX-QD9S)

### General

Dimensions 445 mm (W) × 231 mm (H) × 355 mm (D)

Mass (approx.) 9.0 kg

 U.S. and foreign patents licensed from Dolby Laboratories.



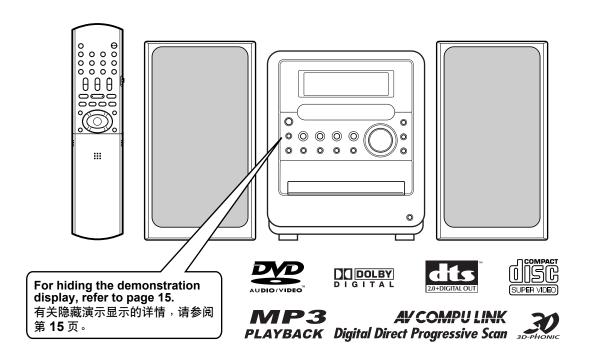
# JVC

# MICRO COMPONENT SYSTEM

微型组合音响

# **UX-QD9S**

Consists of CA-UXQD9S and SP-UXQD9S 由 CA-UXQD9S 和 SP-UXQD9S 组成



**INSTRUCTIONS** 

使用说明书

# Warnings, Cautions and Others / 警告,注意及其他须知事项

### CAUTION

To reduce the risk of electrical shocks, fire, etc.:

- Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

### 注意

为了减少触电、火灾等危险:

- 1. 请勿擅自卸下螺丝钉、盖子或机壳。
- 2. 请勿让本机受雨淋或置于潮湿环境中。

#### CAUTION — O/I button!

Disconnect the mains plug to shut the power off completely.

The O/I button in any position does not disconnect the mains line.

The power can be remote controlled.

### 注意 - ひ! 开关!

想要完全关闭电源,须将电源插头从插座上拔下。 无论 0/1 键处于何种位置,主电路仍旧没有关闭。 电源开关可用遥控器进行控制。

#### CAUTION

- · Do not block the ventilation openings or holes. (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

#### 注意

- 切勿堵塞通风口或通风孔。 (如果通风口或通风孔被报纸或布等物堵塞,热量将无
- 切勿在本系统上放置明火,如点燃的蜡烛。
- 想要丢弃电池时, 务必考虑环保问题以及严格遵守当地 关于处理废旧电池相关的法律规定和条例。
- 切勿让本机受雨淋、受潮湿、落上或溅上水滴,亦勿在 本机上面放置盛满液体的容器, 如花瓶。

### IMPORTANT FOR LASER PRODUCTS / 镭射产品的重要说明

- 1. CLASS 1 LASER PRODUCT
- 2. CAUTION: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
- 3. CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED INSIDE THE UNIT.

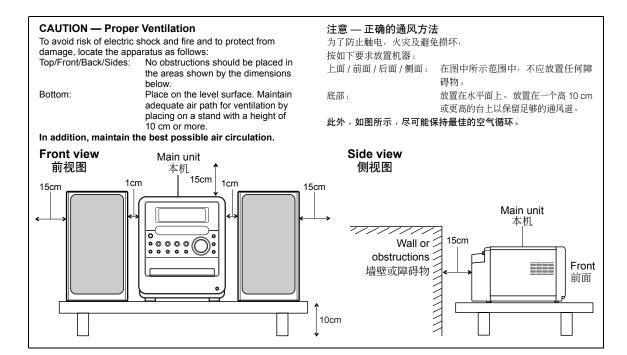
- 1. 一级镭射产品。
- 2. 注意:请勿打开顶盖板,本机内部没有用户可自行维修 的部件; 所有维修工作应由有资格的人员完成。
- 3. 注意: 当内部锁定装置失效或者损坏后, 打开盖板可能 会产生可见或不可见的镭射辐射。 应避免受到镭射光 東的直接照射。
- 4. 标签的复制标示: 注意标签位于机内。

laser radiation when open and laserstråling når maskinen er interlock failed or defeated. åben eller interlocken fejler. AVOID DIRECT EXPOSURE TO BEAM.

**CAUTION**: Visible and invisible **ADVARSEL**: Synlig og usynlig Undgå direkte eksponering til urkopplad. stråling.

Betrakta ej strålen.

**VARNING**: Synlig och **VARO**: Avattaessa ja suojalukitus osynlig laserstrålning när ohitettuna tai viallisena olet alttiina den öppnas och spärren är näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)



# **Table of Contents**

Used frequently marks refer to operation used frequently. You can quickly learn the general usage of this product by reading those parts only.

Introduction	Listening to Radio Broadcasts
Notes on Operation         3           Suitable Locations for the Main Unit         3           Condensation         3           Cleaning the Main Unit         3           Listener's Etiquette         3           Playable Disc Types         4           Disc Structure         5           Selecting the Color System         6	Listening to Radio Broadcasts
Special Cautions	Listening to Discs
Notes on Handling	Basic Operations of the DVD Player 21 Playback
Preparation	Playing Back from a Position 10 Seconds Before (One Touch Replay)23
Part Description	Stopping Playback
Connections	Slow Motion Playback
Basic Operations	Selecting the AudioUsed frequently 26
Basic Operations	Selecting the Subtitle
	Status Bar and Menu Bar34 Using the Status Bar and Menu Bar34
	Playing Back the Designated Part  Repeatedly (A-B Repeat Playback)35

Playing Back MP3/WMA and JPEG	
Discs	.36
Playback	
Repeat Playback	37
Preferences	.38
Basic Operations	
LANGUAGE	
PICTURE	
AUDIO	
OTHERS	
Country/Area Codes	
Language Codes	.41
Listening to Cassette Tapes	
Listening to Cassette Tapes	
Used frequently	42
Озей периспиу	
Listening to Other Equipment	
Listening to Other Equipment	.43
Adjusting the Sound Input Level from	
Other Equipment	43
Recording Sound	
Recording Sound Recording Sound to Cassette Tapes	
Recording Sound to Cassette Tapes	
Recording Sound to Cassette Tapes	45
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc	45
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc  Recording the Second or Subsequent	45 45
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc  Recording the Second or Subsequent  Track to the Last Track from a Disc	45 45
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc  Recording the Second or Subsequent  Track to the Last Track from a Disc  Program Recording from a Disc	45 45
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc  Recording the Second or Subsequent  Track to the Last Track from a Disc  Program Recording from a Disc  Recording with No Blank Time between  Tracks	45 45 45 45
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from	45 45 45 45
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc  Recording the Second or Subsequent  Track to the Last Track from a Disc  Program Recording from a Disc  Recording with No Blank Time between  Tracks	45 45 45 45
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from	45 45 45 45
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc  Recording the Second or Subsequent  Track to the Last Track from a Disc  Program Recording from a Disc  Recording with No Blank Time between  Tracks  Erasing Recorded Sound from  a Cassette Tape  Convenient Functions	45 45 45 45 45
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from a Cassette Tape  Convenient Functions Using the Timers	4545454545
Recording Sound to Cassette Tapes  Used frequently  Quitting Recording  Recording Only One Track from a Disc  Recording the Second or Subsequent  Track to the Last Track from a Disc  Program Recording from a Disc  Recording with No Blank Time between  Tracks  Erasing Recorded Sound from  a Cassette Tape  Convenient Functions	45454545454545
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from a Cassette Tape  Convenient Functions Using the Timers Sleep Timer	45 45 45 45 45 45
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from a Cassette Tape  Convenient Functions Using the Timers Sleep Timer Recording Timer	45 45 45 45 45 45 45 45
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from a Cassette Tape  Convenient Functions Using the Timers Sleep Timer Recording Timer Playback Timer	45 45 45 45 45 45 46 46 47 48
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from a Cassette Tape  Convenient Functions Using the Timers Sleep Timer Recording Timer Playback Timer Auto Standby	45 45 45 45 45 45 45 45 45 45
Recording Sound to Cassette Tapes  Used frequently Quitting Recording Recording Only One Track from a Disc Recording the Second or Subsequent Track to the Last Track from a Disc Program Recording from a Disc Recording with No Blank Time between Tracks Erasing Recorded Sound from a Cassette Tape  Convenient Functions  Using the Timers Sleep Timer Recording Timer Playback Timer Auto Standby Disc Ejection Lock	45 45 45 45 45 45 48 48 50 50

Reference	
Handling Discs/Cassette Tapes5	2
Disc Messages5	3
Troubleshooting5	3
Specifications5	4

# **Notes on Operation**

# Suitable Locations for the Main Unit

To minimize the need for servicing and maintain the high quality of this product, do not place the main unit in the following locations:

- In a position subject to high humidity or considerable dust
- · On an uneven or unstable surface
- Near a heat source
- Near a computer, fluorescent light or other electric appliance
- · In a small room with insufficient ventilation
- In a position exposed to direct sunlight
- · In a position exposed to excessive cold
- · In a position exposed to strong vibration
- · Near a TV, other amplifier, or tuner
- · Near a magnetic source

### CAUTION

 The operating temperature of this product is 5°C to 35°C. Use in temperatures outside this range may cause a malfunction or damage the product.

### Condensation

Under the following conditions, you may not be able to operate this product properly due to condensation formed on the lens of the main unit:

- When you have just started an air conditioner to warm your room
- When you have placed the main unit at an area with high humidity
- When you have moved the main unit from a cold place to a warm place

When condensation forms, leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.

### **Cleaning the Main Unit**

When the operation panel becomes dirty, dust it with a soft dry cloth. When the operation panel is very dirty, wipe it with a cloth dampened with a small amount of a neutral detergent, and then wipe it with a soft dry cloth.

### CAUTION

 Do not wipe the operation panel with thinners, benzenes or other chemical agents. Do not spray insecticides onto the operation panel. These may cause discoloration and damage to the surface.

### **Listener's Etiquette**

When using headphones, keep the volume at a moderate level so as not to over-stimulate your ears.

■When enjoying sound from the speakers, adjust the volume to a suitable level to avoid disturbing your neighbors.

Even low-volume sound carries a long way, especially at night. Show consideration to your neighbors by closing windows or using headphones.

Manufactured under license from Dolby Laboratories. "Dolby", "MLP Lossless", and the double-D symbol are trademarks of Dolby Laboratories.

<sup>• &</sup>quot;DTS" and "DTS 2.0+DIGITAL OUT" are registered trademarks of Digital Theater Systems, Inc.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents
and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright
protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited
viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is
prohibited.

### **Playable Disc Types**

This product has been designed to play back the following discs:

DVD VIDEO, DVD AUDIO, VCD, SVCD, CD This product can also play back the following discs:

- Finalized DVD-R/RW discs recorded in the DVD VIDEO format.
- CD-R/RW discs recorded in the following formats
- Music CDs (finalized discs)
- VCDs
- SVCDs
- MP3/WMA/JPEG discs recorded in ISO 9660 (for details, refer to "About MP3/WMA/JPEG discs") However, some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them. Only sounds can be played back from the following discs:

MIX-MODE CD CD-G CD-EXTRA CD TEXT

### Discs you can play:

Discs you can play.				
Disc Type	Mark (Logo)	Video Format	Region Code Number*	
DVD VIDEO	VIDEO TM VIDEO	PAL/ NTSC	3/ALL	
DVD AUDIO	AUDIO/VIDEO AUDIO	1		
VCD	COMPACT VIDEO CD	PAL/ NTSC	1	
SVCD	COMPACT VIDEO VIDEO SUPER VIDEO CD	PAL/ NTSC		
CD	COMPACT DIGITAL AUDIO	ı		
CD-R	DIGITAL AUDIO Recordable	1	1	
CD-RW	COMPACT DIGITAL AUDIO REWritable	_	_	

DVD Logo is a trademark of DVD Format/Logo Licensing Corporation.

\* Note on Region Code

DVD players and DVD VIDEOs have their own region code numbers. This product can only play back a DVD VIDEO recorded with the region code number and video format mentioned above.

### **Examples:**









If a DVD VIDEO with an improper region code number is loaded, "REGION CODE ERROR!" appears on the TV screen and playback cannot start.

 On some DVD VIDEOs, DVD AUDIOs, VCDs or SVCDs, their actual operation may be different from what is explained in this manual. This is due to the disc programming and disc structure, not a malfunction of this product.

#### About CD-Rs/CD-RWs

You can play back a CD-R/CD-RW only when the disc is finalized.

 You can play back a CD-R/CD-RW which has been recorded in the audio CD format and a CD-R/CD-RW to which audio data (MP3/WMA) or a still picture data (JPEG) file is recorded.

However, playback is impossible in some cases due to the disc characteristics, recording condition, scratches or dirt on the disc, or dirt or condensation on the lens

- Before using a CD-R/CD-RW, carefully read the cautions regarding the disc.
- This product does not support playback or CD text display of sound files such as MP3s
- To play back a CD-RW on this product, erase all tracks if the CD-RW was recorded in a format other than the audio CD format. Using the CD-RW without erasing all tracks may result in damage to the speakers or other parts caused by sudden loud volume.

#### Discs that cannot be played back

 The following discs cannot be played back: DVD-ROM, DVD-RAM, DVD-RW (recorded in VR format), CD-ROM, CD-I (CD-I Ready), Photo CD, SACD, etc.

Playing back these discs will generate noise and damage the speakers.

- Damaged discs and discs in an extraordinary shape (other than a disc of 12 cm or 8 cm in diameter) cannot be played back.
- JVC do not guarantee the operation and sound quality of discs not authorized by CD-DA, which is a CD specification.

Before playback, confirm that the disc complies with this CD specification by checking the marks and reading notes printed on the package.

#### About MP3/WMA/JPEG discs

Playable MP3/WMA/JPEG discs and files

- Discs recorded in the ISO 9660 format are playable (except discs recorded in the "packet write" format (UDF format)).
- Discs recorded in the multi-session format are also playable.
- Files with an extension of ".mp3", ".wma", ".jpg" or ".jpeg" (extensions with uppercase and lowercase letters mixed are also acceptable) are playable

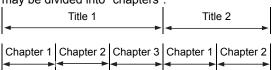
#### Notes on MP3/WMA/JPEG discs and files

- A disc may not be played back, or reading it may take a long time depending on its recording conditions or properties.
- The time needed for reading varies with the number of groups or tracks (files) recorded on the disc.
- If a character other than single byte English characters is used in the file name of an MP3/ WMA/JPEG file, the track/file name will not be displayed correctly.
- The order of tracks/groups displayed on the MP3/WMA Control screen, and the order of files/ groups displayed on the JPEG Control screen may be different from that of files/folders displayed on PC's monitor screen.
- In the case of MP3/WMA discs, since groups/ tracks are played back in alphabetical order, an off-the-shelf MP3/WMA disc may be played back in an order different from that indicated on the label attached to the disc.
- Playing back an MP3/WMA file including a still image may take a long time. The elapsed time is not displayed until playing back starts. If playing back starts, the elapsed time may not be displayed correctly.
- For an MP3/WMA file, a disc with a sampling frequency of 44.1 kHz and transmission rate of 128 kbps is recommended.
- This product is not compatible with MP3i or MP3PRO.
- This product can play back a baseline JPEG file, excluding monochromatic JPEG files.
- This product can play back JPEG data taken with a digital camera conforming to the DCF (Design Rule for Camera File System) standard (when a function is applied such as the automatic rotation function of a digital camera, data goes beyond the DCF standard, so the image may not be displayed).
- If data has been processed, edited and restored with PC image editing software, the data may not be displayed.
- This product cannot play back animations such as MOTION JPEG, or still pictures (TIFF etc.) other than JPEG, and image data with sound.
- The resolution of 640 x 480 pixels is recommended for JPEG files. If a file has been recorded at a resolution of more than 640 x 480 pixels, display may take a long time. An image with a resolution of more than 8 192 x 7 680 pixels cannot be displayed.
- Files recorded on DVD-R/RW discs cannot be played back.

### **Disc Structure**

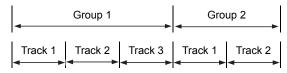
#### **DVD VIDEO**

A DVD VIDEO consists of "titles" and each title may be divided into "chapters".



### **DVD AUDIO**

A DVD AUDIO consists of "groups" and each group may be divided into "tracks". Some discs include a "bonus group" that requires a password for playing ( page 30).



#### VCD/SVCD/CD

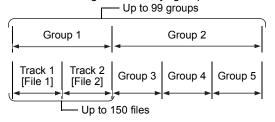
VCD, SVCD and CD consist of "tracks". In general, each track has its own track number. (On some discs, each track may also be further divided by indexes.)



### MP3/WMA [JPEG] discs

On an MP3/WMA [JPEG] disc, each still picture (material) is recorded as a track [file]. Tracks [Files] are usually grouped into a folder. Folders can also include other folders, creating hierarchical folder layers.

This unit simplifies the hierarchical construction of a disc and manages folders by "groups".



This product can recognize up to 1 000 tracks [files] in a disc. Also, the product can recognize up to 150 tracks [files] per group and up to 99 groups in a disc. Since the unit ignores the tracks [files] whose numbers are exceeding 150 and the groups whose numbers are exceeding 99, they cannot be played back.

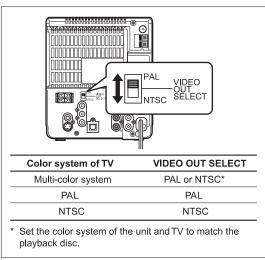
 If there is any type of files other than MP3/WMA [JPEG] files in a disc, those tracks [files] are also counted in the total file number.

# **Selecting the Color System**

This product is compatible with PAL and NTSC color systems.

In standby mode, select PAL or NTSC to match your TV.

If the VIDEO OUT SELECT switch is switched over when the power is on, turn off the power, and then turn it on again.



 Before playing back a disc, it is also required to select the correct MONITOR TYPE in the PICTURE menu according to the aspect ratio of your TV (P page 38).

#### NOTE

 If you play back an NTSC disc with this setting set to "PAL", you can watch the playback pictures (the disc will be reproduced using "PAL 60" format), but the TV screen may rolls over upward and downward rapidly.

- If you play back a PAL disc with this setting set to "NTSC", you can watch the playback pictures, but the following symptoms may occur:
- The items on the disc menu will be blurred, and be shown slightly shifted when highlighted.
- The aspect ratio of the picture may differ from the original aspect ratio.
- · The picture movement is not smooth.

# **Special Cautions**

### **Notes on Handling**

### ■Important cautions

#### Installation of the system

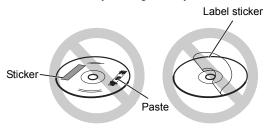
- Select a place which is level, dry and neither too hot nor too cold; between 5°C and 35°C.
- Leave sufficient distance between the system and the TV.
- Do not use the system in a place subject to vibration.

#### Power cord

- Do not handle the power cord with wet hands!
- A small amount of power is always consumed while the power cord is connected to the wall outlet.
- When unplugging the power cord from the wall outlet, always pull on the plug, not the power cord.

### To prevent malfunctions of the system

- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the system.
- Do not use any non-standard shape disc (like a heart, flower or credit card, etc.) available on the market, because it may damage the system.
- Do not use a disc with tape, stickers, or paste on it, because it may damage the system.



### Note about copyright laws

Check the copyright laws in your country before recording from CDs. Recording of copyrighted material may infringe copyright laws.

■Safety precautions

### Avoid moisture, water and dust

Do not place the system in moist or dusty places.

### Avoid high temperatures

Do not expose the system to direct sunlight and do not place it near a heating equipment.

### When you are away

When away on travel or for other reasons for an extended period of time, disconnect the power cord plug from the wall outlet.

#### Do not block the vents

Blocking the vents may damage the system.

#### Care of the cabinet

When cleaning the system, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents including disinfectants. These may cause deformation or discoloring.

### If water gets inside the system

Turn the system off and disconnect the power cord plug from the wall outlet, then call the store where you made your purchase. Using the system in this condition may cause fire or electrical shock.

When condensation or water drops adhere to the lens

In any of the following cases, condensation or water drops may adhere to the lens to prevent the system from working properly:

- · Immediately after roomheating starts
- When the system is installed in a steamy or damp space
- When the system is suddenly moved from a cold place to a warm space

In any of these cases, leave the system turned on for 1 or 2 hours before use.

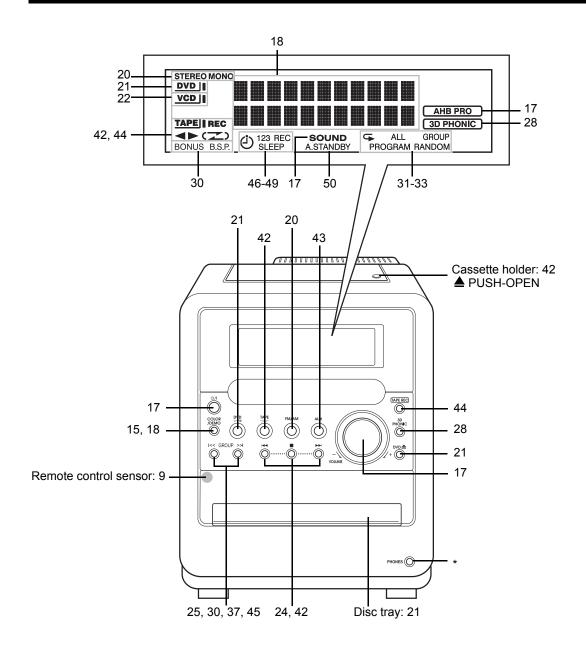
### **Supplied Accessories**

Check to be sure you have all of the supplied accessories.

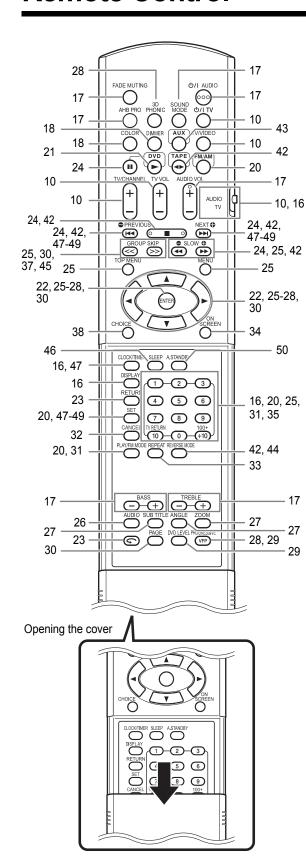
The number in parentheses is the quantity of the pieces supplied. If anything is missing, contact your dealer immediately.

Remote control (1)
Batteries (2)
FM antenna (1)
AM loop antenna (1)
Video cord (1)
AC plug adaptor (1)

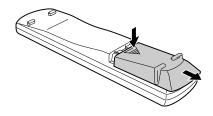
This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

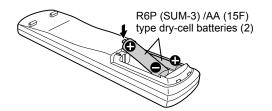


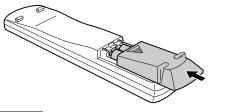
<sup>\*</sup> This terminal is for connecting a pair of headphones equipped with a stereo mini plug (not supplied). While the headphones are connected, the speakers do not produce any sound.



# Inserting Batteries into the Remote Control







### CAUTION

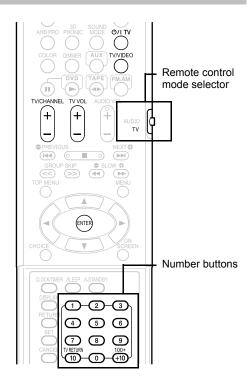
- Do not use a used battery and a new battery together.
- Do not use different types of batteries at the same time.
- Take out the batteries if the remote control is not to be used for a long time. Otherwise it may cause a leakage.

# Remote control operation

- When operating the remote control, point it at the front panel of the main unit.
- The effective distance between the remote control and the remote control sensor on the main unit is approximately 5 m maximum.
- When the effective distance decreases, replace the batteries.
- Do not drop the remote control or subject it to excessive shock.

This page is for when operating your TV using the remote control of this product.

# Operating the TV Using the Remote Control



- Setting the manufacturer's code
- 1 Slide the remote control mode selector to the TV side.



**2** Hold down  $\bigcirc^{\phi/i \, \text{TV}}$ .

NOTE NOTE

Hold down until step 4 is completed.

3 Press energy and release.

### 4 Press number buttons (1-9, 0).

### **Examples:**

For a Hitachi TV: Press 1, then 0. For a Toshiba TV: Press 0, then 8.

If there are two or more manufacturer's codes, try them in turn and select the one that causes the product to work properly.

Manufacturer	Code	Manufacturer	Code
JVC	01	Samsung	12
Hitachi	10	Sanyo	13
Magnavox	02	Sharp	06
Mitsubishi	03	Sony	07
Panasonic	04, 11	Toshiba	08
Philips	14	Zenith	09
RCA	05		

# 5 Release O.

### NOTE

 The manufacturer's codes may be changed without notice. You may not be able to operate a TV produced by the manufacturer shown above.

# For TV operation

Operate the remote control by pointing it towards the TV.

Φ/I TV	Turn on/off the power.		
TV/CHANNEL +	Change channels.		
TV VOL + -	Adjust volume.		
1 - 9 / 0 / +10	AUDIO TV 1	Select channels.	
TV RETURN	Change between the previously selected channel and the current channel.		
TV/MDEO	Change between TV and video input.		

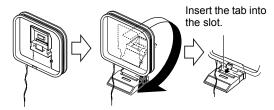
<sup>\*1</sup> Make sure to slide the remote control mode selector to the TV side in advance.

### NOTE

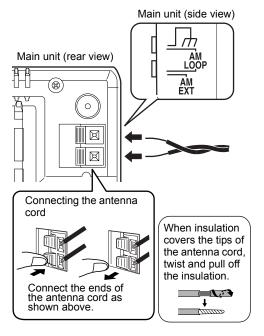
 When the batteries are replaced, perform the manufacturer's code setting again.

### **Connecting the Antennas**

- Connecting the AM antenna
- 1 Set up the AM antenna (supplied).

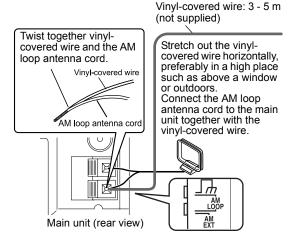


2 Connect the antenna cord.



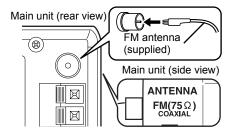
- 3 Turn the AM loop antenna to find the best position for radio reception.
  - Place the AM loop antenna as far from the main unit as possible.
  - Do not place the AM loop antenna on a metallic table or close to a TV, computer, or other electric appliances. Doing so may affect radio reception.

When radio reception with the supplied AM loop antenna is poor

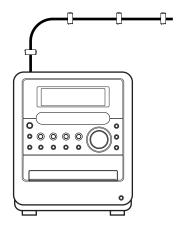


When positioning the antennas, find the best position for reception while listening to an actual radio program (refer to "Listening to Radio Broadcasts" ( page 19)).

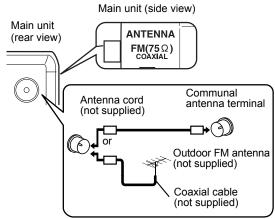
# Connecting the FM antenna



Stretch out the FM antenna to the best position for radio reception, and then fix it with adhesive tape.



When radio reception with the supplied FM antenna is poor, or when using a communal antenna

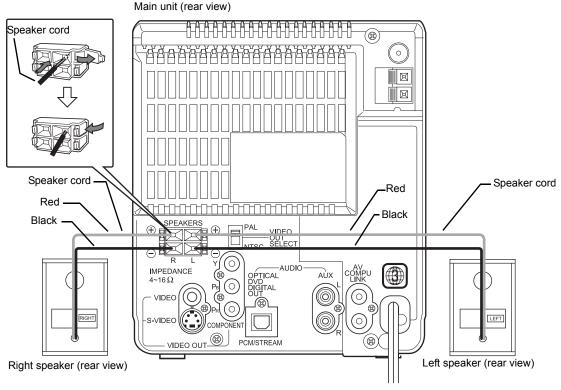


When using an antenna other than those supplied with this product, refer to the operation manuals for the antenna for details of connection.

When positioning the antennas, find the best position for reception while listening to an actual radio program (refer to "Listening to Radio Broadcasts" ( page 19)).

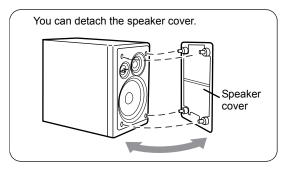
# **Connecting the Speakers**

After connecting the speakers, gently pull on the speaker cords to make sure the cords are firmly connected and do not pull out.



### CAUTION

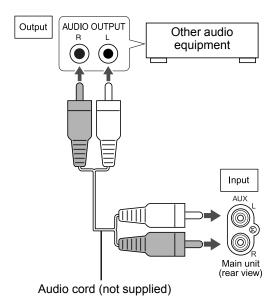
- Do not short-circuit the ⊕ and ⊖ speaker terminals. Doing so may damage the speakers.
- Do not connect other speakers together with the supplied speakers. The change in impedance may damage the main unit and the speakers.
- The speakers of this product are magnetically shielded, but color irregularities may occur on the TV depending on how the speakers are installed. Keep in mind the following.
- Turn off the main power of your TV before installing the speakers. Wait for about 30 minutes before turning on the TV again.
- If color irregularity occurs in pictures, keep a distance of more than 10 cm between the TV and the speakers.



- Improper speaker cord connection spoils the stereo effect and sound quality.
- The impedance of speakers connected to this product must be within the range of 4  $\Omega$  to 16  $\Omega$
- Cooling fan is built into the main unit for emitting generated heat. When you turn on the main unit, the internal cooling fan automatically starts rotating. To ensure sufficient cooling, leave a space of more than 1 cm between the main unit and the speakers or other objects.

## **Connecting Other Equipment**

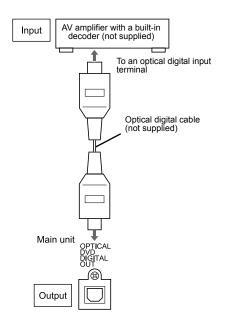
Read this section when connecting other audio equipment to this product.



### CAUTION

• Before connecting other equipment, turn off both the main unit and the equipment.

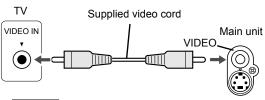
# Connecting with digital equipment



### CAUTION

- For details of signals to be output, refer to page 39.
   If connecting the main unit to equipment that has the function of a Dolby Digital decoder, the setting in "D. RANGE COMPRESSION" of "AUDIO"
- tine function of a Dolby Digital decoder, the setting in "D. RANGE COMPRESSION" of "AUDIO" (pp page 39) will be invalid regarding sound from the digital audio output of the main unit.

## Connecting with a TV



### CAUTION

 Connect the main unit directly with a TV (or a monitor) without routing through a VCR. Otherwise it may cause picture distortion while playing back. (Such picture distortion is caused by a copy protection system, and thus it is not a malfunction.)



Also, if the main unit is connected to a TV with a built-in VCR, there may be picture distortion during playback.

### NOTE

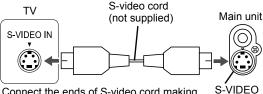
 Please check that the setting for VIDEO OUT SELECT (PAL/NTSC) on the rear panel of the main unit and the color system on your TV set are the

same. ( Page 6)
You need to set "MONITOR TYPE" in the
"PICTURE" menu correctly according to the aspect
ratio of your TV. (Page page 38)

# When a Clearer Picture Is Desired

You can enjoy pictures of better quality using the following cord instead of the supplied video cord.

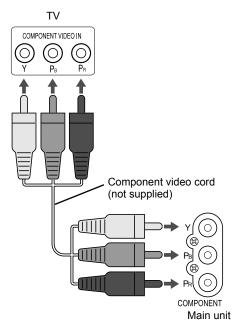
# Connecting by using the S-video cord



Connect the ends of S-video cord making sure that each end matches its compatible terminal.

# Connecting by using the component video cord

You can enjoy better quality pictures than when using the S-video cord.



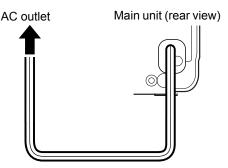
### CAUTION

 Use one of either the S-video cord or the component video cord. If both cords are used, pictures may not be played back properly.

### NOTE

- In order to enjoy pictures with the progressive mode ( page 29), the TV is required to have progressive video input.
- If the component video input jacks of your TV are BNC type, use a plug adapter (not supplied) to convert the plugs.

# **Connecting the Power Plug**



 After making all other necessary connections, connect in the power plug.

### NOTE

- The preset setting such as preset channels and sound adjustment may be erased in a few days in the following cases:
  - When you disconnect the power plug.
  - When a power failure occurs.

# Demonstration display function

When you connect the power plug into the AC outlet, "DEMO START!" appears in the display window and the demonstration display starts.

When you press on the main unit, "DEMO

OFF" appears in the display window and the demonstration display is canceled.

Turning on the main unit automatically cancels the demonstration display.

### Resuming the demonstration display

With the power turned off, press on the main unit.

### Hiding the demonstration display

With the power turned off, hold down outil "DEMO CLEAR" appears.

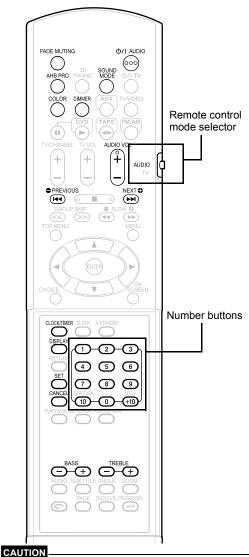
Disconnecting and then reconnecting the power plug does not start the demonstration display.

To activate the demonstration display again,

hold down until "DEMO START!" appears.

# **Basic Operations**

This manual explains the operations assuming that you will use the remote control. Some buttons on the main unit are the same as those on the remote control. You can use either button in this case.



Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



# **Setting the Clock**

You can set the clock while the main unit is turned either on or off.

Example: To set the clock to 10:10 a.m.

1 Press CLOCK/TIMER.

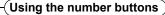


### 2 Set the hour.

PREVIOUS NEXT Back Next

- Holding down the button causes the hour to increment.
- You can use the number buttons to specify the hour.

Refer to "Using the number buttons" shown below.



Set the remote control mode selector to AUDIO before using the number buttons.



Examples: 3: 3

13: <del>(±10)</del> → **(3)** 

20:  $(+10) \rightarrow (10)$ 23:  $(+10) \rightarrow (+10) \rightarrow (3)$ 



**3** Press ○ SET .

10:00

- To return to step 2, press CANCEL
- 4 Set the minute in the same manner as steps 2 and 3.

10:10

# Adjusting the clock

Press four times to display the clock, and then adjust the clock starting from step 2.

# Displaying the clock while using the main unit

Press repeatedly.

- The time display on the main unit is a 24-hour clock.
- The clock will gain or lose approximately 1 minute per month.
- Set the clock again after you have disconnected the power plug or a power cut has occurred.

### **Turning On/Off the Main Unit**

Used frequently

# Press $\bigcirc^{\text{O/I}}$ (or $\bigcirc^{\text{O/I}}$ on the main unit).

 With the power off, pressing either button also turns on the main unit. The function assigned to the button starts working at the same time.

### NOTE

 Cooling fan is built into the main unit for emitting generated heat. When you turn on the main unit, the internal cooling fan automatically starts rotating.

### **Adjusting the Volume**

Used frequently

Press + AUDIO VOL

 You can also adjust the volume by turning the VOLUME control on the main unit.

#### NOTE

 You can adjust the volume within the range of 0 to 40.

# Temporarily Turning Off the Sound (FADE MUTING)

Press FADE MUTING

- "FADE MUTING" appears and the volume reduces to "0".
- To return to the previous volume, press FADE MUTING again.

# Emphasizing Heavy Bass Sound (AHB PRO)

Press AHB PRO

- Each time you press , AHB PRO function toggles between "ON" and "OFF".
- While AHB PRO function is activated,
   AHB PRO is displayed in the display window.
- "AHB PRO" stands for "Active Hyper Bass PRO".

# **Adjusting the Sound Quality**

# Selecting the sound mode

Press SOUND MODE.

• Each time you press on, the display toggles as follows.



 While the sound mode is set to an item other than "FLAT", SOUND is displayed in the display window.

### NOTE

· This function does not affect recording sound.

# Adjusting bass/treble sound

- 1 Press or repeatedly to display "MANUAL".
- 2 For adjusting bass sound;

Press — +.

For adjusting treble sound;

Press — +.

- You can adjust the sound quality within the range of -5 to +5.
- The display returns to the sound source display in a few seconds.

### NOTE

 While the sound mode is set to an item other than "MANUAL", "NO OPERATE" is displayed in the display window and you cannot adjust bass/treble sound.

# **Changing the Color Patterns** for the Display Window and Disc Tray

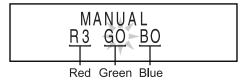
# Press (or on the main unit).

• Each time you press , the display toggles as follows.

RAINBOW : For a rainbow-like pattern. **FLOWER** : For a flower-image pattern. Gradually changes GRADATION<sup>1</sup> the color pattern in a cycle of approximately 20 seconds. OCEAN : For an ocean-image pattern. : For a fantasy pattern. FANTASY MANUAL : For the color of your choice. (The setting R3 G0 B0 shown on the left is initial setting.)

Setting your favorite color for the display window and disc tray

- 1 Press or repeatedly to display "MANUAL".
- Press PREVIOUS or DENT to select a component color.



 Numerical value of the selected component color flashes.

### 3 Press



### to adjust the intensity

### of the component color.

- You can also adjust the color intensity by turning the VOLUME control on the main unit.
- You can adjust the color intensity within the range of "0" to "3".

You cannot set all three component colors (red, green, and blue) to "0" at the same time.

### NOTE

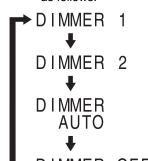
- After you have adjusted each component color, the display returns to the sound source display in approximately 8 seconds.
- You cannot set different colors for the display window and disc tray.
- When you operate a button on the main unit or remote control, the display window and disc tray light in pale blue for approximately 2 seconds.
- When recording finishes, the color of the display window and disc tray switches to the color set in "MANUAL" to inform you that recording has finished. (With an item other than "MANUAL" selected)

When you operate the main unit after recording finishes, the color pattern for the display window and disc tray returns to the selected pattern.

# Changing the brightness of the display window and disc tray (DIMMER)

# Press OMMER

• Each time you press , the display toggles as follows.



- : Color pattern becomes dimmer.
- : Color pattern becomes darker, and switches to blue.
- DIMMER AUTO

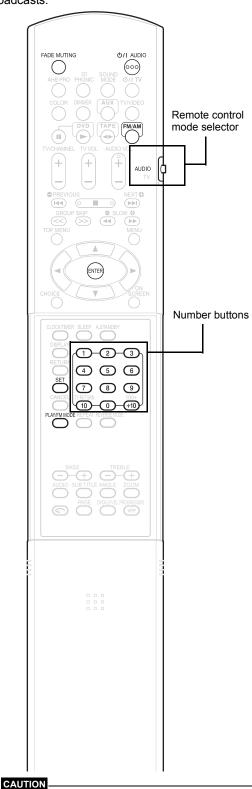
  Under AUTO

  DIMMER 2 is automatically selected during video playback, and is canceled when the playback stops.

  DIMMER OFF: Cancels the brightness
  - adjustment (initial setting).

- Once you press to change the color pattern, the brightness returns to the initial setting. (except for DIMMER AUTO)
- When you turn off the main unit, the brightness also returns to the initial setting.
- · You cannot turn off the color pattern.

This product can receive FM and AM radio broadcasts.



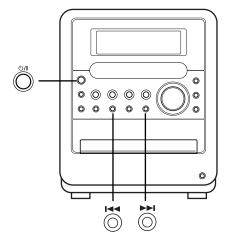
 $\bullet$  Set the remote control mode selector to  $_{\rm AUDIO}$  AUDIO before using the number buttons.  $_{\rm TV}$ 



# **Setting the AM Tuner Spacing**

Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.

### On the main unit ONLY:



### ■When the main unit is turned off

To select 10 kHz spacing, while holding down on the main unit, press on the main unit to turn on the power. "AM 10 kHz" appears in the display window.

To select 9 kHz spacing, while holding down on the main unit, press on the main unit to turn on the power. "AM 9 kHz" appears in the display window.

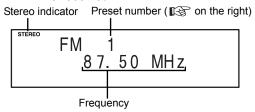
#### NOTE

• If the spacing is switched, the memory in which the radio stations were stored will be erased.

# **Selecting a Radio Station**

1 Press repeatedly to select "FM" or "AM".

Example: Display while an FM radio broadcast is received



Press PREVIOUS or Prepeatedly to select a radio station (frequency).

 You can also select a radio station using the automatic tuning.

### Automatic tuning:

Hold down or be until the frequency starts changing, and then release the button.

When the main unit has received a broadcast, the frequency automatically stops changing.

To quit the function while searching for a broadcast, press PREVIOUS or NEXT (FF).

• When the main unit has received an FM stereo broadcast, "STEREO" lights up.

### NOTE

- If an FM stereo broadcast is difficult to hear because of noise, you may be able to hear more easily by pressing to switch the sound to monaural reception. In this case, "MONO" lights up. To return the sound to stereo reception, press
- again or select another FM radio station.
   This product is not compatible with AM stereo broadcasts.

# Storing Radio Stations (Preset)

You can store up to 30 FM radio stations and up to 15 AM radio stations.

- ■While the broadcast from the radio station you want to preset is being received
- 1 Set the remote control mode selector to AUDIO.



- 2 Press  $\stackrel{\text{\tiny SET}}{\bigcirc}$ .
  - The preset number flashes for approximately 5 seconds.
- While the preset number is flashing, press the number buttons (
  - 10 or 100+) to select the preset number you want to use.
  - Refer to "Using the number buttons" (propage 16).
- 4 While the selected number is flashing, press .
  - "STORED" appears and the selected radio station is stored.

#### NOTE

 When you store a radio station to a preset number to which another radio station has previously been stored, the newly set radio station replaces the previously stored radio station.

# **Tuning In to a Preset Radio Station**

- While an FM or AM broadcast is being received
- 1 Set the remote control mode selector to AUDIO.



- 2 Use the number buttons to select the preset number of the radio station to which you want to tune in.

# **Basic Operations of the DVD Player**

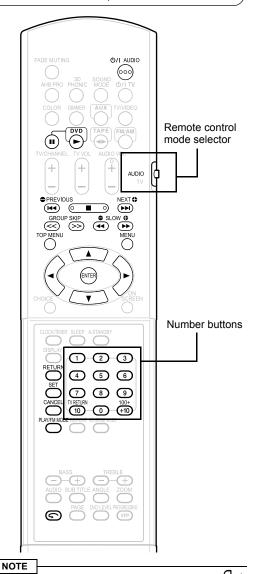
#### How to read this manual

- Operations are described by mainly using the remote control buttons. If there are the same marks on the main unit, the buttons on the main unit can also be used.
- The following marks tell you for which type of the discs the operation can be made.



### **JPEG**

- The illustrations and TV screens may be different between the actual case and the description.
- · "VCD" stands for "Video CD".
- "SVCD" stands for "Super Video CD".



 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.

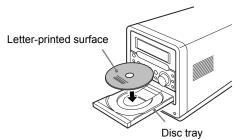
# Playback

Used frequently

### DVD DVD VCD SVCD CD

(Refer to page 36 for playing back MP3/WMA and JPEG.)

- 1 Press ⊚ on the main unit.
  - The disc tray comes out.
- 2 Place a disc on the disc tray.

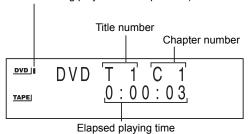


- When you want to listen to an 8 cm disc, place it on the inner hollow of the disc tray.
- 3 Press Prop.
- ■Display for DVD VIDEO

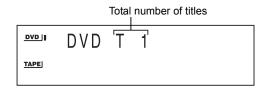
Display while a DVD VIDEO is being played back:

**DVD** indicator

(The DVD indicator lights up while the DVD VIDEO is stopped. The DVD indicator flashes while the DVD VIDEO is being played back or paused.)



### Display while the DVD VIDEO is stopped:

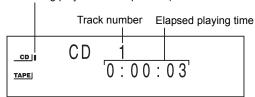


### ■Display for CD

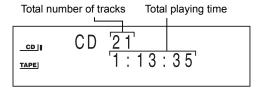
### Display while a CD is being played back:

CD indicator

(The CD indicator lights up while the CD is stopped. The CD indicator flashes while the CD is being played back or paused.)



### Display while the CD is stopped:

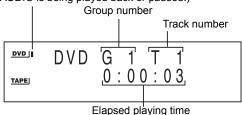


### ■ Display for DVD AUDIO

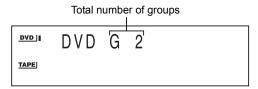
# Display while a DVD AUDIO is being played back:

**DVD** indicator

(The DVD indicator lights up while the DVD AUDIO is stopped. The DVD indicator flashes while the DVD AUDIO is being played back or paused.)



### Display while the DVD AUDIO is stopped:



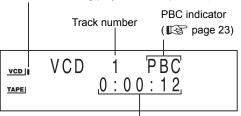
 "G1" and "T1" will appear after the total number of groups is displayed.

### ■ Display for VCD/SVCD

# Display while a VCD/SVCD is being played back:

VCD indicator

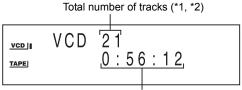
(The VCD indicator lights up while the VCD/SVCD is stopped. The VCD indicator flashes while the VCD/SVCD is being played back or paused.)



Elapsed playing time

PBC indicator is displayed while PBC is activated.

### Display while the VCD/SVCD is stopped:



Total playing time

- \*1 "1" will appear after the total number of tracks is displayed.
- \*2 "PBC" will appear when the disc is PBC-compatible.

### NOTE

- The menu may appear in the display window after DVD playback starts. In such a case, select the desired menu item by using the following buttons on the remote control.
  - Select a menu item with , or or

and then press ENTER

- Select a menu item with the number buttons.
- Operation may differ from the explanation given here, depending on the disc type.

### Messages displayed on the TV screen

While a DVD is selected as the sound source, the messages shown below are displayed, depending on the status.

### **NOW READING**

The main unit is reading the disc. Wait for a while.

### **REGION CODE ERROR!**

The disc cannot be played back because its region code is not compatible. ( Page page 4)

### **NO DISC**

No disc is loaded.

#### OPFN

The disc tray is opening.

### **CLOSE**

The disc tray is closing.

#### **CANNOT PLAY**

You are trying to play back an unplayable disc.

# Guide icons temporarily displayed on the TV screen (on-screen guide)



: Play

(**I**S page 21)



: Pause

( page 24)



: Fast reverse/Fast forward search

(12 page 24)



Slow motion playback (reverse/ forward directions)( page 25)



: Containing multi-angle views ( page 27)



: Containing multi-audio (**I**⊗ page 26)





: The disc cannot accept the operation you have attempted.

### PBC (Playback control)

- PBC is a signal recorded in a VCD (version 2.0) for controlling VCD playback.
   You can operate software that has interactive or search functions using the menu display recorded in a PBC-compatible VCD. To play back a VCD without PBC, follow the operation below.
  - Select the desired track number with the number buttons while playback is stopped.
  - While playback is stopped, press PREVIOUS or Tack number to select the desired track number 1970.

ber, and then press

 While a VCD or SVCD is being played back, press error to the higher menu group.

### Playing Back from a Position 10 Seconds Before (One Touch Replay)

#### DVD VIDEO

■While a disc is being played back

### Press ©.

- This operation may not be carried out for some discs.
- · You cannot return to the previous title.

### Stopping Playback

Used frequently

DVD DVD VCD SVCD C D WMA JPEG





■While a disc is being played back

Press (○ ■ ○).

# **Resuming Playback (RESUME)**

### VIDEO AUDIO VCD SVCD

When playback is stopped in the middle, playback can be started from the stopped scene.

### How to suspend playback

■While a disc is being played back Perform any of the following operations during playback.

Press 

once.\*

to turn off the power.

Change the source to FM/AM or AUX.\*

\* Even if the power is turned off by pressing

after this, the position where playback has been stopped will be stored.



### How to start playback from the stored position

Press

#### NOTE

- · This function does not work in program playback or random playback.
- The position where playback starts again may be a little different from the stopped position.
- · When a disc menu is displayed, the resume function may not work.
- · The audio, the subtitle and the angle at that time are stored as well as the stopped position.
- · The stored position will be cleared if the disc tray is opened. Further, if o is pressed during playback, "RESUME" appears. If o is pressed at this time, "RESUME" will disappear and the stored information will be cleared.
- · Resume function is set to on as the initial preset. You can set the function to off ( page 39).

### Pausing Playback

# DVD DVD VCD SVCD C D MP3 JPEG

■While a disc is being played back

### Press (II).

To resume normal playback, press ( )

• Playback cannot be paused by pressing on the main unit during JPEG disc slide-show.

### **Advancing Picture Frame by** Frame

# VIDEO SVCD VCD DVD

(only for moving image)

■While a disc is paused

### Press (II).

- Each time you press (II), picture will be advanced frame by frame.
- You cannot operate this function with on the main unit.

### Fast Reverse/Fast Forward Search Used frequently

### DVD DVD VCD SVCD C D

There are two methods.

■While a disc is being played back

# Press or 🖒.

• Each time you press ( or ), the speed increases as shown below.

• To restore the normal speed, press ( )

#### Hold down PREVIOUS or ►NEXT • .

 Fast reverse/fast forward search can be carried out only while the button is pressed.

- For a DVD VIDEO, SVCD or VCD, no sound comes out during fast reverse/fast forward search.
- For a CD or DVD AUDIO, sound is intermittent during fast reverse/fast forward search.

# Slow Motion Playback

### VIDEO VCD SVCD DVD

(only for moving image)

■While a disc is paused

Press ♣ SLOW or ► ► ► ► Each time you press ♣ SLOW , the speed increases as shown below.

 $\frac{1}{32} \Rightarrow \frac{1}{16} \Rightarrow \frac{1}{8} \Rightarrow \frac{1}{4} \Rightarrow \frac{1}{2}$ 

• Press (ii) to pause playback, and press to resume normal playback.

### NOTE

- No sound will be produced.
- · The picture motion in the reverse direction may not be smooth.
- · For a VCD or SVCD, slow motion playback can be carried out in the forward direction only.

### Skipping to the Beginning of a Track Used frequently

# DVD DVD VCD SVCD C D

■While a disc is being played back\*

Press PREVIOUS or PREXT OF PREVIOUS

- Each time you press PREVIOUS, the current chapter/track/file skips to the beginning of the previous chapter/track/file
- Each time you press ♠, the current chapter/ track/file skips to the beginning of the next chapter/track/file.
- Press or or belect a title or group.

- \* For a VCD or SVCD, this operation can be carried out only during playback without the PBC function.
- Except for a DVD VIDEO, this operation can also be carried out while the disc is stopped.
- This operation may not be carried out for some discs

### Skipping to the Beginning of a Track with the Number Buttons

# DVD DVD VCD SVCD C D WMA JPEG

- ■While a disc is being played back
- Set the remote control mode selector to AUDIO.



### Press the number buttons (1)-10 or (+10) to select the track/chapter you want to listen to.

 Refer to "Using the number buttons" (pg page 16).

### NOTE

- You can operate a VCD or SVCD while the disc is stopped or played back with PBC off.
- You can operate a DVD AUDIO, CD, MP3, WMA, or JPEG while the disc is either played back or stopped.
- This operation may not be carried out for some

### Selecting a Track from the Menu Screen

### VIDEO AUDIO VCD SVCD

- ■While a disc is stopped or being played
- Set the remote control mode selector to AUDIO.



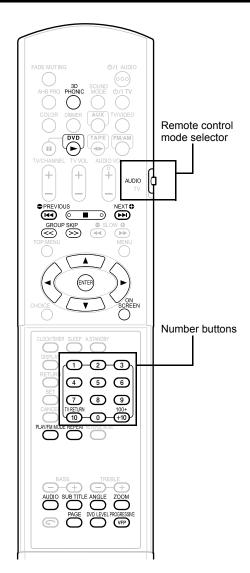
- $\textbf{Press} \overset{\text{\tiny{MENU}}}{\bigcirc} \textbf{or} \overset{\text{\tiny{TOP\,MENU}}}{\bigcirc}.$ 
  - · A menu screen of the disc appears.
  - Only can be used for DVD AUDIOs.
- )►) (only for a

### DVD VIDEO or a DVD AUDIO) or the number buttons to select a track you want to listen to.

- Refer to "Using the number buttons" (**p** page 16).
- If there are two or more pages of menu screen, press PREVIOUS or NEXT to change the pages (only for a VCD or SVCD).
- Press (ENTER)

- \* You can operate a VCD or SVCD while PBC is set
- You cannot perform this function with discs to which a menu screen is not recorded.
- Some disc may start playback even if you do not press (ENTER)

## **Convenient Functions of the DVD Player**



#### NOTE

• Set the remote control mode selector to AUDIO AUDIO before using the number buttons. TV



## **Selecting the Audio**

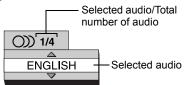
Used frequently

### DVD DVD VCD SVCD

■While a disc containing two or more audio is being played back

## 1 Press on.

**Example: TV screen** 



• Each time you press on, the audio will be changed. The audio can also be changed by pressing .

## 2 Wait for a few seconds or press



- You can also operate this function by using the menu bar ( page 34).
- For a language code such as "AA", refer to "Language Codes" ( page 41).
- When 2 channel sounds are recorded in 1/2 and multi channel sounds with down-mix prohibited are recorded in 2/2 in a DVD AUDIO, you can select 1/2 only.

## Selecting the Subtitle

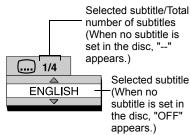
### DVD SVCD DVD

(only for moving image)

While a disc containing two or more subtitles is being played back

## 1 Press SUBTITLE.

**Example: TV screen** 



- 2 Press to select a subtitle.
- 3 Wait for a few seconds or press



#### NOTE

- You can also operate this function by using the menu bar ( page 34).
- For an SVCD, each time you press on step 1, the subtitle type and ON/OFF will be changed.
- For a language code such as "AA", refer to "Language Codes" ( page 41).
- The manner of displaying subtitles may be different depending on the disc.

## Canceling the subtitle

Press to select "OFF".

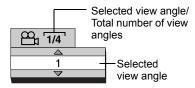
## **Selecting a View Angle**

### DVD DVD

(only for moving image)

- While a disc containing two or more view angles is being played back
- 1 Press ANGLE.

#### **Example: TV screen**



• Each time you press on, the angle will be changed. The angle can also be changed by pressing ...

## 2 Wait for a few seconds or press



#### NOTE

 You can also operate this function by using the menu bar ( page 34).

## **Magnifying the Picture (ZOOM)**

## DVD VCD SVCD DVD JPEG

(only for moving image)

- ■While a disc is played back or paused
- 1 Press COM
  - Each time you press , the picture magnification will be changed (OFF, ZOOM1 - 6).
  - When a JPEG disc is used, the picture magnification changes through "ZOOM 1", "ZOOM 2" to "OFF". You cannot change the picture magnification during slide-show playback.

### 2 Select the portion you want to see



#### CAUTION

 When you magnify a picture, image quality may be deteriorated or image may be distorted.

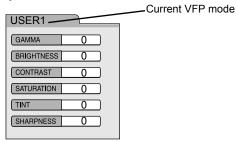
## **Adjusting the Picture Quality** (VFP)

## DVD DVD VCD SVCD JPEG

■While a disc is played back or paused

### Press (VFP).

**Example: TV screen** 



#### Setting items

GAMMA Controls the brightness of neutral

tints while maintaining the brightness of dark and light

portions.

(Setting range: -3 - +3)

BRIGHTNESS: Controls the brightness of the

display.

(Setting range: -8 - +8)

CONTRAST : Controls the contrast of the

display.

(Setting range: **-7 - +7**)

SATURATION: Controls the saturation of the

display.

(Setting range: **-7 - +7**)

TINT Controls the tint of the display.

(Setting range: -7 - +7)

SHARPNESS: Controls the sharpness of the

display.

(Setting range: -8 - +8)

### Press ( to select VFP mode.

NORMAL : For normal playback.

(You cannot adjust the image

quality.)  $\rightarrow$  Go to step 7.

CINEMA Suitable when viewing a movie in

a dim room.

(You cannot adjust the image

quality.)  $\rightarrow$  Go to step 7.

USER1/USER2: You can adjust the image quality.

 $\rightarrow$  Go to step 3.

### Press to select an item you want to adjust.

Press (ENTER).

#### Example:



- Press to change the value.
- Press (ENTER)
  - To adjust other items, go back to step 3.
  - Press VFP.

NOTE

- If no operation is made for several seconds during the procedure, the settings made so far will be automatically stored.
- "VFP" stands for "video fine processor".

## Creating Realistic Sound (3D PHONIC)

## DVD DVD VCD SVCD C D MP3 WMA

The two speakers produce an effect resembling surround-sound.

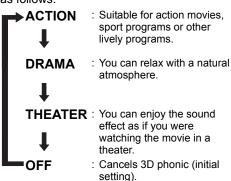
■While a disc is being played back



#### **Example: TV screen**



ັ<sup>NC</sup>. the display toggles · Each time you press as follows.



• While 3D phonic is activated, 3D PHONIC is displayed in the display window.

- 3D phonic is effective for both the speakers and headphones.
- · When noise is produced or sound is distorted, set "3D PHONIC" to "OFF".
- You cannot operate some types of DVD AUDIO discs.

# Adjusting Playback Level (DVD LEVEL)

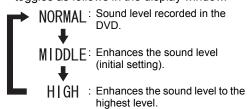
### DVD DVD VIDEO AUDIO

The audio of a DVD VIDEO and DVD AUDIO may be recorded at a lower level (volume) than for other types of disc. You can adjust the DVD level.

■While a disc is being played back

## Press OVD LEVEL.

• Each time you press on the display toggles as follows in the display window.



 Select the level while listening to the sound played back.

#### NOTE

- · DVD level is effective only for playback of a DVD.
- Even if the DVD level is changed, the output level from the digital audio output terminal will not be changed.
- · This function does not affect recording sound.

# **Enjoying Better Pictures** (PROGRESSIVE)

In the progressive mode, you can enjoy better pictures.

#### CAUTION

- In order to enjoy pictures in the progressive mode, the following requirements should be met.
  - There must be component video input terminals on the TV set connected to the main unit.
  - The main unit and the TV set must be connected using a component video cord
     (Lag page 15).

When the above requirements are not satisfied, leave the main unit in the Interlace mode. If the progressive mode is set, pictures may be distorted.

■While the disc is played back or paused

### Hold down (VFP).

• Each time you press (PP), the display toggles as follows.

#### Interlace mode (initial setting)

INTERLACE



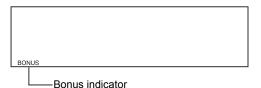
#### Progressive mode

**PROGRESSIVE** 

# Playing Back the Bonus Group

#### DVD AUDIO

There are some DVD AUDIO discs with a special group, called "bonus group", recorded.



- This operation can be carried out when "BONUS" is lit in the display window on the main unit.
- ■While a disc is being played back
- 1 Set the remote control mode selector to AUDIO.

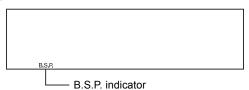


- 2 Press Prepeatedly during playback to select a bonus group.
  - "KEY\_\_\_\_" appears on the TV screen and in the display window on the main unit.
- 3 Press the number buttons to enter a pin code (4 digits).
  - The method of getting a pin code is different depending on the disc.
- 4 Press ENTER
  - When a correct pin code is entered, "BONUS" disappears and the playback of the bonus group starts.
  - If an incorrect pin code is entered, try entering a correct pin code again.

# **Browsable Still Pictures** (B.S.P.)

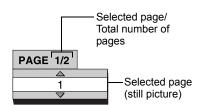
#### DVD AUDIO

There are some DVD AUDIO discs with still pictures recorded. Among the still pictures, there are pictures called B.S.P. (browsable still pictures). You can change these pictures as if turning over pages.



- This operation can be carried out when "B.S.P." is lit in the display window on the main unit.
- ■While a disc is being played back
- 1 Press .
  - Each time you press , the still picture will be switched over.
  - You can also change the pictures by pressing \_\_\_\_\_.

#### **Example: TV screen**



2 Wait for a few seconds or press



#### NOTE

• You can operate this function on the menu bar (12) page 34).

# Playing Back the Disc in the Desired Order (Program Playback)

### DVD DVD VCD SVCD C D MP3 WMA

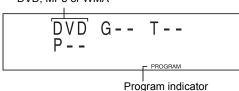
You can program a maximum of 99 chapters or tracks. You can program the same chapter or track more than once.

- ■While a disc is stopped
- 1 Set the remote control mode selector to AUDIO.

2 Press CAPITY to select "PROGRAM".

■ Display for DVD VIDEO

■ Display for DVD AUDIO/MP3/WMA DVD, MP3 or WMA

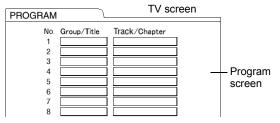


■ Display for CD/VCD/SVCD

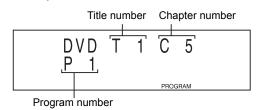


"VCD" is displayed while Program indicator VCD/SVCD is selected.

#### **Example: For DVD VIDEO**



- 3 Press the number buttons (① ⑥ or ⊕ ) to program chapters/ tracks.
- Display for DVD VIDEO
  - Select a title number, and then select a chapter number.



- Display for DVD AUDIO/MP3/WMA
  - Select a group number, and then select a track number.

DVD, MP3 or WMA

Group number

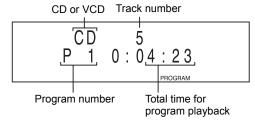
Track number

DVD G 1 T 5

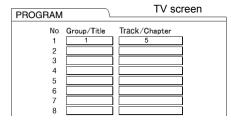
PROGRAM

Program number

- Display for CD/VCD/SVCD
  - Select a track number.



#### **Example: For DVD VIDEO**



- Refer to "Using the number buttons" (
  page 16).
- Before selecting a bonus group of a DVD AUDIO, cancel the "BONUS" display as explained in "Playing back the Bonus Group" on page 30.
- When you try to enter more than 99 chapters or tracks, "MEMORY FULL" appears.

## 4 Press Prop.

Confirming programmed content

### While playback is stopped, press

PREVIOUS or NEXT⊕ repeatedly.

Canceling program playback

While playback is stopped, press repeatedly to display an item other than "PROGRAM".

• This operation does not erase the programmed content.

Erasing the whole program

While playback is stopped, hold down

#### NOTE

 Ejecting the disc or turning off the main unit also erases the programmed content. This operation also cancels program playback.

## Random Playback

DVD DVD VCD SVCD C D MP3 WMA

You can listen to tracks or chapters in random order.

- While playback is stopped
- 1 Press repeatedly to select "RANDOM".

Example: For CD



• "RANDOM" appears in the TV screen.

## 2 Press Press



- Pressing repeatedly does not return play-back to the previous track.
- · Each track is played back once.

## Canceling random playback

While playback is stopped, press repeatedly to display an item other than "RANDOM".

#### NOTE

• Ejecting the disc or turning off the main unit also cancels random playback.

## **Repeat Playback**

### DVD DVD VCD SVCD C D

Refer to page 37 for repeat playback of MP3/WMA and JPEG files.

■While a disc is being played back

## Press EPEAT.

• Each time you press each, the repeat type will be changed.

#### For DVD VIDEO

Repeat types	Display on the TV screen	Display in the display window on the main unit
Repeats the current chapter	CHAP*	REPEAT CHAPTER* <sup>Ç</sup>
Repeats the current title	TITLE	REPEAT TITLE ⊊ALL
Cancels repeat	<b>○</b> OFF	REPEAT OFF

#### For DVD AUDIO

Repeat types	Display on the TV screen	Display in the display window on the main unit	
Repeats the current track	TRACK*	REPEAT TRACK* ←	
Repeats the current group	<b>◯</b> GROUP	REPEAT GROUP GROUP	
Cancels repeat	<b>Ď</b> OFF	REPEAT OFF	

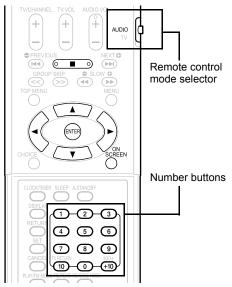
#### For CD/VCD/SVCD

Repeat types	Display on the TV screen	Display in the display window on the main unit	
Repeats the current track	TRACK*	REPEAT TRACK* ←	
Repeats all tracks	ALL ALL	REPEAT ALL ⊊ALL	
Cancels repeat	Ĉ OFF	REPEAT OFF	

<sup>\* &</sup>quot;STEP" is displayed during program playback or random playback.

- For a VCD and SVCD, the operation can be carried out during playback without the PBC function (IPP page 23).
- You can also operate this function on the menu bar ( page 34).
- For details on A-B repeat (repeat playback of a designated part), refer to page 35.

## Status Bar and Menu Bar



## DVD DVD VCD SVCD C D

You can display the status bar and menu bar on the TV screen, and can control discs with the bars.

#### CAUTION

 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



### **Using the Status Bar and** Menu Bar

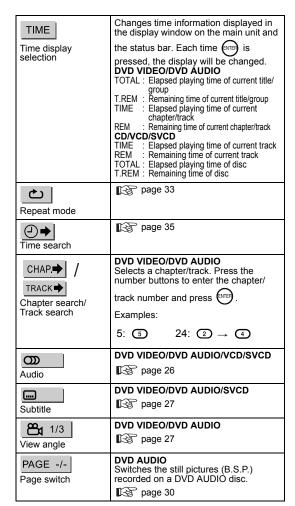
- ■While a disc is being played back
- Press twice.



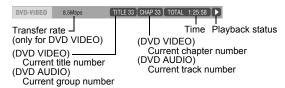
- The above is an example for a DVD VIDEO.
- Press (-( )-) to select an item you want to operate.
- Press (ENTER)
  - You can set the selected function. For the setting items, refer to the following "Function
  - · The currently active function shows blue.
  - To cancel the menu bar, press

## Function list

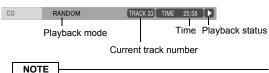
Press to select, and press (ENTER) to determine unless otherwise noted.



Information displayed on the status bar DVD VIDEO/DVD AUDIO (the example below is for a DVD VIDEO)



VCD/SVCD/CD (the example below is for a CD)



· The playback status mark has the same meaning of the mark on the on-screen guide ( page 23).

# Playing Back the Designated Part Repeatedly (A-B Repeat Playback)

### DVD DVD AUDIO VCD SVCD C D

■While a disc is being played back

- 1 Press on twice.
  - The menu bar ( page 34) appears.
- 2 Press ( ) to select coff.
- 3 Press ENTER.
- 4 Press to select
- 5 Press enter at the starting point of the part to be repeated (designating A point).
  - The icon on the menu bar will be 🗠 🕒 |.
- 6 Press at the end of the part to be repeated (designating B point).
  - The icon on the menu bar will be 🖰 🕒 🗚-🗷 ].
    - "\$\infty\$ A-B" appears in the display window on the main unit and the part between A and B points is played back repeatedly.

## Canceling A-B repeat playback

- To cancel A-B repeat playback:

  - Select AB and press (Select Oper ).)

#### NOTE

- You can operate a VCD and SVCD while the disc is played back with PBC off.
- A-B repeat playback is possible only within the same title or track. A-B repeat playback cannot be carried out during PBC playback, program playback, random playback and repeat playback.

# Designate the Time (Time Search)

### DVD DVD VCD SVCD C D

- ■While a disc is being played back
- 1 Set the remote control mode selector to AUDIO.



- 2 Press control twice.
  - The menu bar appears ( page 34).
- 3 Press ( ) to select ( →).
- 4 Press (ENTER)
- 5 Enter the time using the number buttons (1-9, 0).

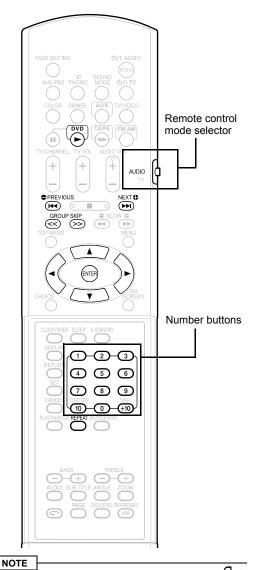
Example: When you want to play back a disc from the position of (0 hour) 23 minutes 45 seconds, press the buttons in the order:



- You can skip entering "minutes" and "seconds".
- If you enter wrong numbers, press to delete the numbers, and then enter the numbers again.
- 6 Press ENTER.
  - To delete the menu bar, press COREN.

- You may not be able to operate this function depending on the disc.
- This function does not work during program playback or random playback.
- For a CD, this operation can always be carried out. For a VCD or SVCD, the operation can be carried out when the disc is stopped or during playback without the PBC function.
- Time search for a DVD VIDEO is from the beginning of the title, for a DVD AUDIO is from the beginning of the track being played back.
   Time search for a VCD, SVCD and a CD is as follows:
  - When the disc is stopped, time search is from the beginning of the disc.
  - When the disc is being played back, time search is within the track currently being played back.

## Playing Back MP3/WMA and JPEG Discs



• Set the remote control mode selector to AUDIO AUDIO before using the number buttons.

## **Playback**



Display of an MP3/WMA disc is described here as an example.

For a JPEG disc, read "track" as "file".

#### NOTE

 When playing back a disc containing both MP3/ WMA and JPEG files, set one of them to be played (PP page 38).

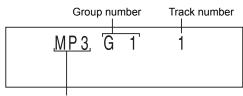
#### Insert a disc.

#### Example: TV screen

This indicator lights up during repeat playback This indicator lights up ( page 37). during program playback Elapsed playing time of ( page 31). the selected track Group list (only for MP3/WMA). FILE PROGRAM REPEAT STEP Time 00:02:15 Track: 1/6 (Total 128)
1. begonia.mp3 Group: spring summe german chamomile.mp3 kiwi fruit.mp3 orchard grass.mp3 montain Track Information petunia.mp3 north pale.mp3 Title begonia Artist nipper kun Album Voice Tag information of the

selected track (only for MP3s/WMAs) Track list (Tracks contained in the selected group)

#### **Example: Display window**



"WMA" is displayed when a WMA disc is loaded, and "JPG" is displayed when a JPEG disc is loaded.

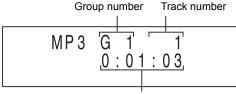
- 2 Press 🗘 🔻 to select a group.
- 3 Press > to move to the track list.Pressing returns to the group list.

(Continued on next page)

## 4 Press to select a track.

## 5 Press or or enter.

#### **Example: Display during playback**



Elapsed playing time (This indicator is not displayed while a JPEG is loaded.)

- · At first, a track title (file name) is scrolled.
- When an MP3 or WMA is loaded, tag information (title/artist/album) is scrolled followed by a track title.
- Only alphanumerical one-byte characters are displayed properly as a track title or tag information.

#### NOTE

- You can also use  $\stackrel{\mathsf{GROUP}\,\mathsf{SKIP}}{\Longleftrightarrow}$  and  $\stackrel{\mathsf{GROUP}\,\mathsf{SKIP}}{\Longrightarrow}$  in step 2.
- You can also use the number buttons in step 4. In this case, steps 3 and 5 are not needed. Refer to "Using the number buttons" (\*\*) page 16).
- You can also use PREVIOUS or PREVIOUS in step 4. In this case, step 3 is not needed.

## Slide-show playback JPEG

- For a JPEG disc, when you press 5, files are continuously played back from the selected file (slide-show playback). When you press (NTE), only a selected file is played back.
- A file is displayed for approximately 3 seconds in a slide-show playback.
- After all files are played back, the playback is automatically stopped.

## Repeat Playback

#### MP3 WMA JPEG

■While a disc is being played back

## Press CEPEAT.

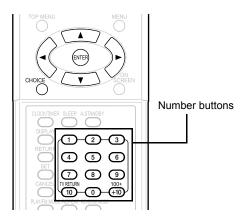
Repeat types	Display on the TV screen	Display display wi the mai	ndow on
Repeats the current track (only for MP3/ WMA)	REPEAT TRACK*	REPEAT* TRACK	Ç
Repeats the current group	REPEAT GROUP	REPEAT GROUP	<b>GROUP</b>
Repeats the entire disc	REPEAT ALL	REPEAT ALL	ÇALL
Cancels repeat playback	No display	REPEAT OFF	

\* "STEP" is displayed during program playback and random playback.

- The repeat types can also be changed while the disc is stopped.
- The repeat playback is automatically canceled if there is a file that cannot be played back
   (page page 4).

## **Preferences**





You can change the initial settings of this product according to the environment the product is used in.

#### CAUTION

 Set the remote control mode selector to AUDIO AUDIO before using the number buttons.



#### NOTE

 The top and bottom of the preference screen may not be displayed on a wide TV. Adjust the picture size on the TV.

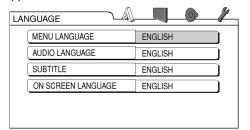
## **Basic Operations**

This section explains basic operation for changing various settings.

■While a disc is stopped or no disc is loaded (while "NO DISC" is displayed)

## 1 Press CHOICE

 "SETTING" appears in the display window on the main unit and the following screen appears on the TV.



• Proceed with operations by following the description on the TV screen.



#### NOTE

- If the selected language is not recorded on the disc, the optimum language set for the disc appears.
- For a language code such as "AA", refer to the "Language Codes" ( Page 41).

Items	Contents
MENU LANGUAGE	Select the language for the DVD VIDEO menu.
AUDIO LANGUAGE	Select the audio language for the DVD VIDEO.
SUBTITLE	Select the subtitle language for the DVD VIDEO.
ON SCREEN LANGUAGE	Select the language displayed on the preference screens.

# PICTURE

Items	Contents ( : initial setting)
MONITOR	Select a display method suitable for your TV.
TYPE	4:3 LB/4:3 MULTI LB (letter box): Select this item when the aspect ratio of your wide TV is fixed to 16:9 (when playing back a DVD VIDEO recorded at 4:3, this product automatically adjusts the screen width of the output signal).  4:3 LB/4:3 MULTI LB (letter box): Select this item when the aspect ratio of your TV is conventional 4:3. While viewing a wide screen picture, the black bars appear on the top and bottom of the screen.
	4:3 PS/4:3 MULTI PS (pan scan): Select this item when the aspect ratio of your TV is conventional 4:3. While viewing a wide screen picture, the left and right edges of the picture will not be shown on the screen. (If the disc is not compatible with the pan scan, the picture will be displayed at the letter box ratio.)
PICTURE SOURCE	Select an item suitable to the video source.  VIDEO: Select this item when you want to view a normal video. FILM: Select this item when you want to view a film or video recorded with the progressive scan method. AUTO: The video source type (a video or film) is automatically selected.
SCREEN SAVER	Select the screen saver mode between ON/OFF (screen saver activates when there is no operation made for about 5 minutes since a still picture was last displayed).
FILE TYPE	If a disc includes an AUDIO file (MP3/WMA) and a still picture file (JPEG), select which file is played back. If you change this setting, open and close the disc tray, or momentarily turn off the main unit. (A disc either with audio files or still picture files can be played back regardless of this setting.)

## AUDIO

Items	Contents ( : initial setting)
DIGITAL AUDIO OUTPUT	Select an output signal type from the following in accordance with the equipment connected to the digital audio output terminal (AV amplifier, etc.). (See the list below for the preference items and output signal.)
	PCM ONLY: Equipment corresponding only to linear PCM.
	<b>DOLBY DIGITAL/PCM:</b> Dolby digital decoder or equipment having the same function.
	STREAM/PCM: DTS/Dolby digital decoder or equipment having the same function.
DOWN MIX	Switch signal from the digital output terminal of the DVD VIDEO according to the connected equipment. Select this when Digital Audio Output is set to "PCM ONLY".
	DOLBY SURROUND: A dolby pro logic decoder-built-in equipment.
	STEREO: An ordinary equipment.
	When 3D phonic is activated, Down Mix does not work.
D (Dynamic). RANGE COMPRESSION	To make adjustments for the difference between a high volume and a low volume when playing back with low volume (only for a DVD recorded with Dolby digital).
	AUTO : D. range compression automatically works.
	ON: D. range compression always works.



Items	Contents ( : initial setting)
RESUME	( 📭 page 24)
ON SCREEN GUIDE	Select whether you display guide icons on the on-screen guide indicating status of a disc/main unit (For details on the guide icons, refer to page 23)
AV COMPU LINK MODE	When you want to control JVC TV by using this product, select a mode that matches the terminal from the following. (For more details, refer to "Using AV COMPU LINK" on page 51.)
	DVD1: Connect to the video-3 input on the TV set.
	DVD2: Connect to the video-1 input of the TV set.
	DVD3: Connect to the video-2 input of the TV set.
PARENTAL LOCK	Set the parental lock function to cut off violent scenes or replace the scenes with others. (This is effective only for discs equipped with the parental lock function.)
	COUNTRY CODE ( Page 40) Select your country or area.
	SET LEVEL: The restriction is stricter as the number becomes smaller. "NONE" is no restriction.
	PASSWORD (essential): Enter four-digit number as your password using the number buttons (1-9, 0) every time. (Enter "8888" if you forget your password.) The password is required at the time of playback.
	If you enter a wrong password three times,     "EXIT" will be automatically selected.

# List of relationships of DIGITAL AUDIO OUTPUT preference items and output signal

Playback disc	D	IGITAL AUDIO OUTPUT preferer	nce
	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
48 kHz, 16/20/24 bits Linear PCM DVD VIDEO 96 kHz linear PCM DVD VIDEO		48 kHz, 16 bits stereo linear PCN	Л
48/96/192 kHz, 16/20/24 bits linear PCM DVD AUDIO	48 kHz, 16 bits stereo linear PCM		
44.1/88.2/176.4 kHz, 16/20/24 bits linear PCM DVD AUDIO	44.1 kHz, 16 bits stereo linear PCM		
DTS DVD VIDEO	DTS bit stream 48 kHz, 16 bits stereo linear PCM		stereo linear PCM
DOLBY DIGITAL DVD VIDEO/ DVD AUDIO	DOLBY DIGI	TAL bit stream	48 kHz, 16 bits stereo linear PCM
CD/VCD/SVCD	44.1 kHz, 16 bits stereo linear PCM/48 kHz, 16 bits linear PCM		
DTS CD	DTS bit stream 44.1 kHz, 16 bits linear PCM		bits linear PCM
MP3/WMA disc	32/44.1/48 kHz, 16 bits linear PCM		

<sup>•</sup> For a DVD VIDEO without content protection set, there is a 20 bit or 24 bit output at the digital audio output terminal.

# **Country/Area Codes**

AD	Andorra
ΑE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AZ	
	Azerbaijan
BA	Bosnia and
	Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
	Burundi
BI	
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
ВО	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling)
	Islands
	Control African
CF	Central African
CF	
	Republic
CG	Republic Congo
CG CH	Republic Congo Switzerland
CG CH CI	Republic Congo Switzerland Côte d'Ivoire
CG CH CI CK	Republic Congo Switzerland Côte d'Ivoire Cook Islands
CG CH CI CK CL	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile
CG CH CI CK	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon
CG CH CI CK CL	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile
CG CH CI CK CL	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon
CG CH CI CK CL CM CN CO	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia
CG CH CI CK CL CM CN CO CR	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica
CG CH CI CK CL CM CN CO CR CU	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba
CG CH CI CK CL CM CN CO CR CU CV	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde
CG CH CI CK CL CM CN CO CR CU CV CX	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island
CG CH CI CK CL CM CN CO CR CU CV CY	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus
CG CH CI CK CL CM CN CO CR CU CV CX	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island
CG CH CI CK CL CM CN CO CR CU CV CY	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus
CG CH CI CK CL CM CN CO CR CU CV CY CZ	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic
CG CH CI CK CL CM CN CO CR CU CV CY CZ DE	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti
CG CH CI CK CL CM CN CO CR CU CV CY CZ DE DJ DK	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark
CG CH CI CK CL CM CN CO CR CU CV CZ DE DJ DK DM	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica
CG CH CI CK CL CM CO CO CR CU CV CX CY CZ DE DJ DK DM DO	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominican Republic
CG CH CI CK CL CM CO CR CU CV CX CY CZ DE DJ DK DM DO DZ	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria
CG CH CI CK CL CM CN CO CCR CU CV CX CY CZ DE DJ DK DM DO DZ EC	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador
CG CH CI CK CL CM CO CR CV CV CZ DE DJ DK DM DO DZ EC EE	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia
CG CH CI CK CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia
CG CH CI CK CL CM CO CR CV CV CZ DE DJ DK DM DO DZ EC EE	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia
CG CH CI CK CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG	Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia

ES	Spain
	<u>'</u>
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
	(Malvinas)
FM	Micronesia
	(Federated States of)
FO	Faroe Islands
FR	France
FX	France, Metropolitan
GA	Gabon
GB	United Kingdom
GD	Grenada
GE	Georgia
GF	French Guiana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe
GQ	Equatorial Guinea
GR	Greece
GS	South Georgia and
	the South Sandwich
	Islands
СТ	Guatemala
GT	
GU	Guam
GW	Guinea-Bissau
GY	Guyana
HK	Hong Kong
HM	Heard Island and
НМ	Heard Island and
	McDonald Islands
HN	McDonald Islands Honduras
HN HR	McDonald Islands Honduras Croatia
HN HR HT	McDonald Islands Honduras Croatia Haiti
HN HR HT	McDonald Islands Honduras Croatia Haiti Hungary
HN HR HT	McDonald Islands Honduras Croatia Haiti
HN HR HT	McDonald Islands Honduras Croatia Haiti Hungary
HN HR HT HU	McDonald Islands Honduras Croatia Haiti Hungary Indonesia
HN HR HT HU ID IE IL	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel
HN HR HT HU ID IE IL IN	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India
HN HR HT HU ID IE IL	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean
HN HR HT HU ID IE IL IN	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory
HN HR HT HU ID IE IL IN IO	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq
HN HR HT HU ID IE IL IN IO IQ IR	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of)
HN HR HT HU ID IE IL IN IO	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland
HN HR HT HU ID IE IL IN IO IQ IR	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of)
HN HR HT HU ID IE IL IN IO	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland
HN HR HT HU ID IE IL IN IO IQ IR IR IS IT JM	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica
HN HR HT HU ID IE IL IN IO IQ IR IR IS IT JM JO	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO J P	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO J P KE KG KH KI	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of ) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO J P KE KG KH KI	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of ) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM KN KP	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic People's Republic of
HN HR HT HU ID IE IL IN IO IQ IR IS IS IT JM JO JP KE KG KH KI KM KN KP	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic People's Republic of Korea, Republic of
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM KN KP	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic People's Republic of Kuwait
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM KN KP KR KW KY	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic People's Republic of Kuwait Cayman Islands
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM KN KP	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic People's Republic of Kuwait
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM KN KP KR KW KY	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic People's Republic of Kuwait Cayman Islands
HN HR HT HU ID IE IL IN IO IQ IR IS IT JM JO JP KE KG KH KI KM KN KP KR KW KY KZ	McDonald Islands Honduras Croatia Haiti Hungary Indonesia Ireland Israel India British Indian Ocean Territory Iraq Iran (Islamic Republic of) Iceland Italy Jamaica Jordan Japan Kenya Kyrgyzstan Cambodia Kiribati Comoros Saint Kitts and Nevis Korea, Democratic People's Republic of Kuwait Cayman Islands Kazakhstan

LC	Saint Lucia		
LI	Liechtenstein		
LK	Sri Lanka		
LR	Liberia		
LS	Lesotho		
LT	Lithuania		
LU	Luxembourg		
LV	Latvia		
LY	Libyan Arab		
	Jamahiriya		
MA	Morocco		
MC	Monaco		
MD	Moldova, Republic of		
MG	Madagascar		
МН	Marshall Islands		
ML	Mali		
MM	Myanmar		
MN	Mongolia		
МО	Macau		
MP	Northern Mariana		
	Islands		
MQ	Martinique		
MR	Mauritania		
MS	Montserrat		
MT	Malta		
MU	Mauritius		
MV	Maldives		
MW	Malawi		
MX	Mexico		
MY	Malaysia		
MZ			
	Mozambique Namibia		
NA NC	Namibia New Caledonia		
NC	New Caledonia		
NE	Niger		
NF	Norfolk Island		
NG	Nigeria		
NI	Nicaragua		
NL	Netherlands		
NO	Norway		
NP	Nepal		
NR	Nauru		
NU	Niue		
NZ	New Zealand		
OM	Oman		
PA	Panama		
PE	Peru		
PF	French Polynesia		
PG	Papua New Guinea		
PH	Philippines		
PK	Pakistan		
PL	Poland		
PM	Saint Pierre and		
	Miquelon		
PN	Pitcairn		
PR	Puerto Rico		
PT	Portugal		
PW	Palau		
PY	Paraguay		
QA	Qatar		
RE	Réunion		
RO	Romania		
RU	Russian Federation		
RW	Rwanda		
SA	Saudi Arabia		
SB	Solomon Islands		
SC	Seychelles		

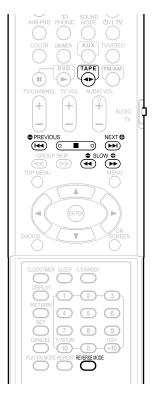
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan
	Mayen
SK	Slovakia
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	
	Sao Tome and Principe
SV	El Salvador
SY	Syrian Arab Republic
SZ	Swaziland
TC	Turks and Caicos
	Islands
TD	
TD	Chad
TF	French Southern
	Territories
TG	Togo
TH	Thailand
TJ	Tajikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania, United
	Republic of
UA	Ukraine
UG	Uganda
UM	United States Minor
	Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State
	(Holy See)
VC	Saint Vincent and the
	Grenadines
VE	Venezuela
	Virgin Islands (British)
V/C	virum maranus (DHIISH)
VG	
VI	Virgin Islands (U.S.)
VI VN	Virgin Islands (U.S.) Viet Nam
VI	Virgin Islands (U.S.)
VI VN	Virgin Islands (U.S.) Viet Nam
VI VN VU	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna
VI VN VU WF	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands
VI VN VU WF	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa
VI VN VU WF WS YE	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen
VI VN VU WF	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa
VI VN VU WF WS YE	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen
VI VN VU WF WS YE YT YU	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia
VI VN VU WF WS YE YT YU ZA	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia South Africa
VI VN VU WF WS YE YT YU ZA ZM	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia South Africa Zambia
VI VN VU WF WS YE YT YU ZA	Virgin Islands (U.S.) Viet Nam Vanuatu Wallis and Futuna Islands Samoa Yemen Mayotte Yugoslavia South Africa

# **Language Codes**

Code	Language	Code	Language
AA	Afar	MK	Macedonian
AB	Abkhazian	ML	Malayalam
AF	Afrikaans	MN	Mongolian
AM	Ameharic	MO	Moldavian
AR	Arabic	MR	Marathi
AS	Assamese	MS	Malay (MAY)
AY	Aymara	MT	Maltese
AZ	Azerbaijani	MY	Burmese
BA	Bashkir	NA	Nauru
BE	Byelorussian	NE	Nepali
BG	Bulgarian	NL	Dutch
BH	Bihari	NO	Norwegian
BI	Bislama	OC	Occitan
BN	Bengali, Bangla	OM	(Afan) Oromo
BO	Tibetan	OR	Oriya
BR	Breton	PA	Panjabi
CA	Catalan	PL	Polish
CO	Corsican	PS	Pashto, Pushto
CS	Czech	PT	Portuguese
CY	Welsh	QU	Quechua
DA	Danish	RM	Rhaeto-Romance
DZ	Bhutani	RN	Kirundi
EL	Greek	RO	Rumanian
EO		RU	Russian
ET	Esperanto Estonian	RW	
EU		SA	Kinyarwanda Sanskrit
FA	Basque Persian		
FI	Finnish	SD	Sindhi
FJ		SG	Sangho
	Fiji	SH	Serbo-Croatian
FO	Faroese	SI	Singhalese
FY	Frisian	SK SL	Slovak
GA	Irish		Slovenian
GD	Scots Gaelic	SM	Samoan
GL	Galician	SN	Shona
GN	Guarani	SO	Somali
GU	Gujarati	SQ	Albanian
HA	Hausa	SR	Serbian
HI	Hindi	SS	Siswati
HR	Croatian	ST	Sesotho
HU	Hungarian	SU	Sundanese
HY	Armenian	SV	Swedish
IA	Interlingua	SW	Swahili
IE	Interlingue	TA	Tamil
IK	Inupiak	TE	Telugu
IN	Indonesian	TG	Tajik
IS	Icelandic	TH	Thai
IW	Hebrew	TI	Tigrinya
JI	Yiddish	TK	Turkmen
JW	Javanese	TL	Tagalog
KA	Georgian	TN	Setswana
KK	Kazakh	TO	Tonga
KL			
	Greenlandic	TR	Turkish
KM	Cambodian	TS	Tsonga
KM KN	Cambodian Kannada	TS TT	Tsonga Tatar
KM KN KO	Cambodian Kannada Korean (KOR)	TS TT TW	Tsonga Tatar Twi
KM KN KO KS	Cambodian Kannada Korean (KOR) Kashmiri	TS TT TW UK	Tsonga Tatar
KM KN KO KS	Cambodian Kannada Korean (KOR) Kashmiri Kurdish	TS TT TW UK UR	Tsonga Tatar Twi Ukrainian Urdu
KM KN KO KS KU	Cambodian Kannada Korean (KOR) Kashmiri Kurdish Kirghiz	TS TT TW UK UR UZ	Tsonga Tatar Twi Ukrainian Urdu Uzbek
KM KN KO KS KU KY	Cambodian Kannada Korean (KOR) Kashmiri Kurdish Kirghiz Latin	TS TT TW UK UR UZ VI	Tsonga Tatar Twi Ukrainian Urdu
KM KN KO KS KU KY LA	Cambodian Kannada Korean (KOR) Kashmiri Kurdish Kirghiz Latin Lingala	TS TT TW UK UR UZ	Tsonga Tatar Twi Ukrainian Urdu Uzbek
KM KN KO KS KU KY	Cambodian Kannada Korean (KOR) Kashmiri Kurdish Kirghiz Latin	TS TT TW UK UR UZ VI	Tsonga Tatar Twi Ukrainian Urdu Uzbek Vietnamese
KM KN KO KS KU KY LA	Cambodian Kannada Korean (KOR) Kashmiri Kurdish Kirghiz Latin Lingala	TS TT TW UK UR UZ VI VO	Tsonga Tatar Twi Ukrainian Urdu Uzbek Vietnamese Volapuk
KM KN KO KS KU KY LA LN	Cambodian Kannada Korean (KOR) Kashmiri Kurdish Kirghiz Latin Lingala Laothian	TS TT TW UK UR UZ VI VO WO	Tsonga Tatar Twi Ukrainian Urdu Uzbek Vietnamese Volapuk Wolof
KM KN KO KS KU KY LA LN LO	Cambodian Kannada Korean (KOR) Kashmiri Kurdish Kirghiz Latin Lingala Laothian Lithuanian	TS TT TW UK UR UZ VI VO WO XH	Tsonga Tatar Twi Ukrainian Urdu Uzbek Vietnamese Volapuk Wolof Xhosa

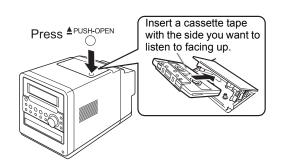
Used frequently

## **Listening to Cassette Tapes**



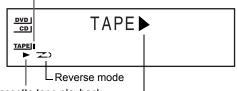
	Operation
Stop	Press •••.
Fast forward/ Rewind	Press PREVIOUS  • When a cassette tape is played back in the normal direction (►), PREVIOUS  • When the cassette tape is played back in the normal direction (►), PREVIOUS  • When the cassette tape is played back in the opposite direction (◄), PREVIOUS  • Start forward and PREVIOUS  • Start forward and PREVIOUS  • You can perform the same operation by pressing Start or SLOW PREVIOUS  • SLOW PRE

## Insert a cassette tape.



#### Cassette tape indicator

(The cassette tape indicator lights up while the cassette tape is stopped. The cassette tape indicator flashes while the cassette tape is being played back.)



Cassette tape playback direction (►: normal direction/**◄**: opposite direction)

#### CAUTION

- · Before using a cassette tape, wind up any slack in the cassette tape. ( page 52)
- · Do not use long cassette tapes such as C-120 or C-150. Long cassette tapes are thin and stretch easily, and may become tangled in the inner part of the main unit.
- · This product is compatible with playback of TYPE I cassette tapes. Playback of TYPE II or TYPE IV cassette tapes is not recommended, because this product does not meet the specifications for these tapes. The main unit does not produce the proper sound from these cassette tape types.

### Press repeatedly to select the reverse mode.

: For one return playback of both

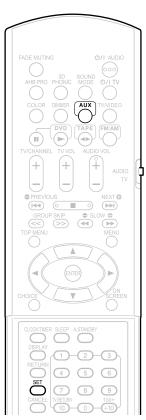
For repeated playback of both sides (Playback continues until playback is stopped.)

: For one-way playback of either side.

## Press (TAPE)

- · Playback starts.
- When the main unit is turned off, pressing automatically turns on the main unit.
- Each time you press (TAPE), the cassette tape playback direction changes. The initial playback direction after you have inserted a cassette tape is always the normal direction.
- The cassette tape playback direction indicator facing right ► is displayed during normal playback. The indicator facing left ◀ is displayed during reverse playback.

## **Listening to Other Equipment**



1 Press O.

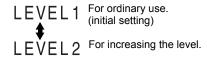


- 2 Start other equipment playback.
  - Refer to the operation manual for the connected equipment.
- Adjust the volume and make other necessary settings.
   For adjusting the volume and making other
  - For adjusting the volume and making other necessary settings, refer to "Basic Operations" ( page 17).

# Adjusting the Sound Input Level from Other Equipment

Adjusting the sound input level of the AUX

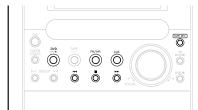
- 1 Press O.
- Hold down in until the input level appears.
  - Each time you hold down , the display toggles as follows.



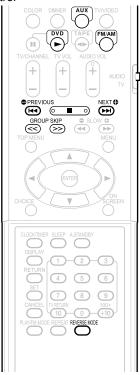
## **Recording Sound to Cassette Tapes**

Used frequently

#### Main unit



#### Remote control



#### NOTE

- The sound input level during recording is automatically adjusted.
- When you record tracks from a disc, a 4-second blank is inserted between tracks in the recording. You can record tracks with no blank time.

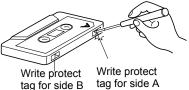
( page 45)

#### CAUTION

- It may be unlawful to record or playback copyright material without the consent of the copyright owner.
- Do not use long cassette tapes such as C-120 or C-150. Long cassette tapes are thin and stretch easily, and may become tangled in the inner part of the main unit.
- Since this product is not compatible with TYPE II and TYPE IV cassette tapes, do not use these types of cassette tapes. This product does not meet the specifications for these tapes, so sound is not properly recorded to these types of cassette tapes. You cannot obtain proper playback sound.

# Preventing recorded sound from being erased

- Write protect tags are attached to a cassette tape for preventing the erasing of recorded sound. They enable you to avoid losing important recordings because once you snap off the write protect tags, you cannot record to the cassette tape or erase recorded material.
- When you want to use the cassette tape for recording again, cover the tag holes with adhesive tape.



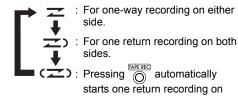
## 1 Insert a cassette tape for recording.

 Before inserting the cassette tape, wind the tape past the leader part of the cassette tape.



# 2 Press to select the reverse mode.

• Each time you press heres, the display toggles as follows.



both sides.

• You can change the reverse mode during recording.

(Continued on next page)

### 3 Select a sound source for recording.

Sound source	Operation
Disc	Press , and then press . (The disc is stopped.)
Radio broadcast	Select the radio station whose broadcast you want to record ( F page 19).
Sound from other equipment (AUX)	Press on and prepare playback on the other equipment ( Fee page 43).

4 Press on the main unit.

Example: Display while CD sound is recorded



- When you record from a disc, all tracks are recorded to the cassette tape.
- When you want to record sound from other equipment, start playback on the connected equipment.
- When recording finishes, the color pattern of the display window and disc tray switches to the color pattern set in "MANUAL" to inform you that recording has finished ( page page 18).

## **Quitting Recording**

Press **■** .

# Recording Only One Track from a Disc

(Excluding DVD VIDEOs)

Before proceeding to step 4, play back the track you want to record.

Pressing in step 4 returns playback to the beginning of the track and only that track is recorded.

### Recording the Second or Subsequent Track to the Last Track from a Disc

(For a DVD VIDEO: while the disc is paused)

■For a CD/VCD/SVCD/DVD VIDEO

Before proceeding to step 4, select the starting track/chapter number by

pressing PREVIOUS or PREXTO.

■For a DVD AUDIO/MP3/WMA

Before proceeding to step 4, select the group number by pressing or and then select the track number by pressing or PREVIOUS or PREVIOUS or PREVIOUS OF PREVIOUS O

## Program Recording from a Disc

Before proceeding to step 4, program the tracks you want to record (

# Recording with No Blank Time between Tracks

Before proceeding to step 4, play back a disc, pause the playback, and then press for return to the beginning of the first track.

# **Erasing Recorded Sound from a Cassette Tape**

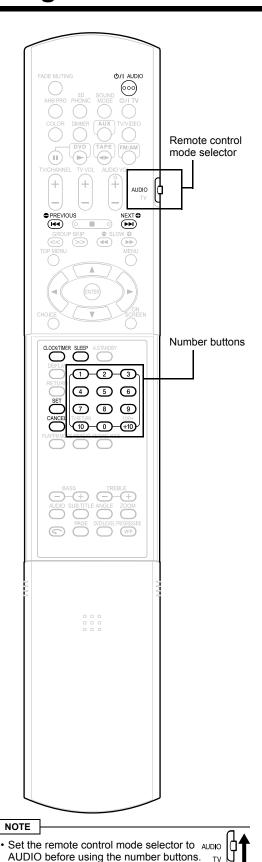
Select the sound from other equipment (AUX) in step 3, and then press

TAPE REC

 Do not play back any tracks on the connected equipment.

#### NOTE

 If the cassette tape reverses direction while a track is being recorded from a disc, this product starts recording that track again from the beginning onto the reverse side of the cassette tape. However, if 12 or less seconds of that track were recorded onto the first side of the cassette tape, recording to the reverse side of the cassette tape starts from the beginning of the previous track.



## **Sleep Timer**

When the specified time passes, the main unit automatically turns off.

## Press .

• Each time you press , the time display (in minutes) toggles as follows.

## Example: Display while the sleep timer is set to 60 minutes



#### NOTE

- When you set the sleep timer, the display window automatically dims.
- Before the clock has been set (While "0:00" is flashing), when you press , "CLOCK ADJUST!" appears.

## Changing the sleep timer setting

- Press  $\stackrel{\text{\tiny SLEEP}}{\bigcirc}$  repeatedly to select the time again.
- Confirming the sleep timer setting (remaining time)
- With the sleep timer activated, press once.

## **Recording Timer**

You can use the recording timer function to record FM/AM broadcasts or sound from other equipment to cassette tape.

You can enter up to three timer settings in total for the recording timer and the playback timer ( page 48).

#### NOTE

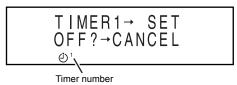
 Timer settings remain unchanged until the timer is replaced by new setting.

## 1 Prepare the sound source.

-	
Radio	Preset the radio station whose broadcast you want to record.  ( Preset the radio station whose broadcast you want to record.
Other equipment	Follow the operation manual for the equipment.

- 2 Insert a cassette tape. ( page 42)
- 3 Press repeatedly to select "TIMER1", "TIMER2" or "TIMER3".

Example: When "TIMER1" is selected



- 4 Press .
- Fress ♣PREVIOUS, NEXT OF OT OT to set the starting time and ending time.

Example:To set the recording time from 6:30 a.m. to 6:45 a.m.

- You can use the number buttons to set the recording time. Refer to "Using the number buttons" (Refer page 16).
- For setting the clock, refer to "Setting the Clock" ( Page page 16).

Entering the "hour"  $\rightarrow \bigcirc^{\text{SET}} \rightarrow$  Entering the "minute"  $\rightarrow \bigcirc^{\text{SET}}$ 

6 Press PREVIOUS or NEXT to select "ONCE" or "EVERYDAY".

ONCE : The recording timer works

once.

EVERYDAY: The recording timer works

every day.

- **7** Press  $\stackrel{\text{SET}}{\bigcirc}$ .
- 8 Press PREVIOUS or DEN to select "REC TIMER".
  - "REC" stands for "Recording".
- 9 Press .
- 10 Press ♣PREVIOUS or ♠EXT ♦ to select a sound source.

Example: To record an FM broadcast to a cassette tape



- When you want to record sound from other equipment, you cannot use the recording timer function to start playback on any equipment other than this product.
- ■When you want to record an FM/AM radio broadcast
  - Press , and then press , NEXT or the number buttons to select the preset number of the radio station whose broadcast you want to record. Refer to "Using the number buttons" (Press or Next of Press or Next or Next of Press or
- 11 Press .
  - The settings appear in the display window. Confirm the settings.
- 12 When the main unit is on, press

to turn off the main unit.

SEE	YOU
₫ ¹ REC	

- While the recording timer is functioning, the volume is set to "0" and no sound is produced from the speakers or headphones.
- The recording timer is available only when the main unit is turned off.

#### NOTE

 During operation, you can return to the previous step by pressing CANCEL. You can quit the recording timer settings by pressing COOKTIMER. The settings are not stored.

## Canceling the recording timer

In step 2 on page 47, select the timer number you want to cancel, and then press CANCEL.

Even when you cancel the recording timer, the set-

Even when you cancel the recording timer, the setting remains stored.

## Activating the recording timer again

In step 2 on page 47, select the timer number you want to activate, and then press repeatedly until all of the setting procedure finishes. Then turn off the main unit.

#### NOTE

- When you want to activate two or three recording timers, leave a blank time of 2 or more minutes between the ending time of the first recording timer and the starting time of the second recording timer. If the blank time is less than 2 minutes, the second recording timer does not work.
- When the power plug is disconnected or the power is cut, the recording timer settings may be lost. If the settings are lost, set the clock and recording timer again.

### **Playback Timer**

## 1 Prepare the sound source you want to play back.

Disc	Make sure that a disc is loaded. ( <b>I</b> ☞ page 21)
Cassette tape	Insert a cassette tape. ( P page 42)
Radio	Preset the radio station whose broadcast you want to listen to. ( page 20)
Other equipment	Follow the operation manual for the equipment.

# 2 Press repeatedly to select "TIMER1", "TIMER2" or "TIMER3".

Example: When "TIMER2" is selected



- 3 Press .
- 4 Press ♣ PREVIOUS, NEXT OF Or or to set the starting time and ending time.

Example: When you want to set the playback time from 7:00 a.m. to 7:30 a.m.

- You can use the number buttons to set the playback time. Refer to "Using the number buttons" ( page 16).
- For setting the clock, refer to "Setting the Clock" ( page 16).

Entering the "hour"  $\to \stackrel{\text{\tiny SET}}{\longrightarrow} \to$  Entering the "minute"  $\to \stackrel{\text{\tiny SET}}{\longrightarrow}$ 

5 Press ♣PREVIOUS or ♠PP to select "ONCE" or "EVERYDAY".

ONCE : The playback timer works once. EVERYDAY : The playback timer works every day.

- 6 Press .
- 7 Press ♣PREVIOUS or ♠PREVIOUS or ♠PREVIOUS to select "PLAY TIMER".

(Continued on next page)

- 8 Press .
- 9 Press or or to select the sound source you want to play back.

Example: When you want to listen to an AM broadcast



- When you want to listen to sound from other equipment, you cannot use the playback timer function to start playback on any equipment other than this product.
- You cannot use the playback timer function together with program playback, repeat playback or random playback of a disc.
- ■When you want to listen to an FM/AM radio broadcast
  - (With "FM" or "AM" selected) Press ☐, and then press ☐, end then press ☐, end then press or the number buttons to select the preset number of the radio station whose broadcast you want to listen to (□ page 20). Refer to "Using the number buttons" (□ page 16).
- ■When you want to play back a DVD VIDEO or DVD AUDIO
  - (With "DVD/CD" selected) Press twice. Regardless of the displayed numbers of group (G) and track (T), you can play back a DVD VIDEO or DVD AUDIO only from the beginning of the disc.
- ■When you want to play back a CD, VCD or SVCD
  - (With "DVD/CD" selected) Press twice, and then press PREVIOUS, NEXT or the number buttons to select the number of a track (T) from which you want to start playback. Refer to "Using the number buttons" (Propage 16). The group number (G) is ignored.
- When you want to specify a track from which you want to start playback on an MP3 or WMA
  - (With "DVD/CD" selected) Press , press PPREVIOUS, NEXT or the number buttons to select the group number (G) to be played back, press , and then press previous, NEXT or the number buttons to select the track number (T) to be played back. Refer to "Using the number buttons" (Refer to "Day age 16).

- 10 Press .
- 11 Press PREVIOUS or D to adjust the playback volume.
- - The settings appear in the display window.
- 13 When the main unit is turned on,

press o to turn off the main unit.

SEE	YOU	
<u>ئ</u> 2		

• The playback timer is available only when the main unit is turned off.

#### NOTE

- During operation, you can return to the previous step by pressing CANCEL. You can quit the playback timer settings by pressing COCKTIMER. The settings are not stored.
- When the playback timer starts, the volume gradually increases to the selected level.

# Canceling the playback timer function

In step 2 on page 48, select the timer number you want to cancel, and then press CANCEL.

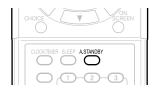
Even when you cancel the playback timer, the setting remains stored.

## Activating the playback timer again

In step 2 on page 48, select the timer number you want to activate, and then press repeatedly until all of the setting procedure finishes. Then turn off the main unit.

- When you want to activate two or three playback timers, leave a blank time of 2 or more minutes between the ending time of the first playback timer and the starting time of the second playback timer. If the blank time is less than 2 minutes, the second playback timer does not work.
- When the power plug is disconnected or the power is cut, the playback timer settings may be lost. If the settings are lost, set the clock and playback timer again.
- When you operate the playback timer with a DVD VIDEO, DVD AUDIO or VCD, sound and video may not be played back automatically. A DVD VIDEO, DVD AUDIO or VCD may contain a disc menu that appears first when played back. Sound or video will not come out before you select the desired item to be played back on the disc menu.

## **Auto Standby**

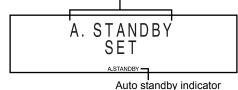


If no sound is produced for 3 minutes when the disc or cassette tape is selected as a sound source, the main unit automatically turns off.

■When the disc or cassette tape is selected as a sound source

Press A.STANDBY.

"A. STANDBY" stands for "Auto Standby".



## Auto standby performance

When playback or recording finishes, auto standby starts the countdown (the "A. STANDBY" indicator flashes). When no operation is carried out within 3 minutes, the main unit automatically turns off. When you start playback or recording within 3 minutes, auto standby starts the countdown again after playback or recording finishes.

When an operation other than playback and recording finishes and no operation is carried out within 3 minutes, the main unit automatically turns off.

"A. STANDBY OFF" indicator starts to flash 20 seconds before the main unit is to turn off.

Canceling auto standby

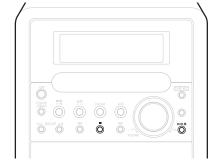
Press once again.

A. STANDBY CANCEL

#### NOTE

Leaving the volume at "0" is not the same as producing no sound, and therefore does not start the auto standby function.

## **Disc Ejection Lock**



You can prohibit ejection of a disc.

■When the main unit is turned off

While holding down o, press on the main unit.



Even if you press , "LOCKED" appears in the display window and the disc does not come out. In addition, when you press , while the main unit is turned off, "LOCKED" appears in the display window and the main unit does not turn on.

## Canceling the disc ejection lock

■When the main unit is turned off Carry out the operation explained above once again.

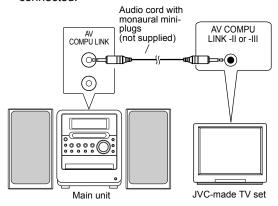
UNLOCKED

## **Using AV COMPU LINK**

The JVC AV COMPU LINK system allows you to enjoy video or audio with the simplest operation. If your JVC TV set supports the JVC AV COMPU LINK system, simply starting the main unit will automatically make all necessary settings on the TV to allow you to enjoy the playback.

## **Connection and Setting**

 Carefully read manuals of equipment to be connected.



Set the main unit's AV COMPU LINK MODE setting (1237 page 39) as follows.

- When connecting to the VIDEO-1 input terminal of the TV: DVD 2
- When connecting to the VIDEO-2 input terminal of the TV: DVD 3
- When connecting to the VIDEO-3 input terminal of the TV: DVD 1

## **Operations**

You can enjoy sound or video simply by starting playback on the main unit. You do not have to select the input setting for the TV, or turn on the TV beforehand.

- 1 Turn on the main power to the TV.
- 2 Insert a disc into the main unit.
- 3 Press on the main unit.

The following operation is performed automatically.

- The TV set will be turned on.
- TV input will be switched to external input (Video 1, 2 or 3) of the main unit.

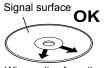
When you turn off the main unit, power to the TV is not turned off.

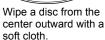
## **Handling Discs/Cassette Tapes**

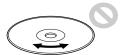
### Handling discs

- Do not put adhesive tape or stickers, or write on a disc.
- · Do not bend a disc.
- Be sure not to use heart/flower shaped discs or other irregularly shaped discs. The use of such discs damages the main unit.

## Cleaning discs







Scratches concentrated on a certain part cause sound dropout.

• Be sure not to use thinners, benzenes, cleaners for analog records, or other chemical agents.

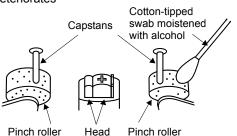
## Handling cassette tapes

• A slack tape may become caught in the inner part of the main unit and damage the main unit.

Before using a cassette tape, wind up any slack in the cassette tape as shown on the right. Do not pull out the tape or touch the tape's surface.

## Cleaning the tape deck head

 Clean the head, pinch rollers and capstans approximately every 10 hours of playback time before the volume falls or sound quality deteriorates



## Cleaning the main unit cabinet

- Gently dust the cabinet surface with a soft dry cloth. When the cabinet is very dirty, dampen the cloth with a neutral detergent diluted with water, wring out the cloth well, and then wipe the cabinet with the dampened cloth followed by a soft dry cloth.
- Do not wipe the cabinet with thinners or benzenes. Wiping it with these agents may cause discoloration of the cabinet or removal of the paint. Do not spray insecticides or other highly volatile agents onto the cabinet. Do not leave pieces of rubber or plastic on the cabinet for a long period.

## **Disc Messages**

Disc message	Meaning	Possible solution
CANNOT PLAY	You are trying to play back an unplayable disc or a disc that has many scratches.	Replace the disc.
NO DISC	No disc is loaded.	-
NO AUDIO	The disc may be an illegally copied disc.	You cannot listen to the disc.
LR ONLY	You are playing back a multi-channel track for which down-mix is prohibited.	This is normal operation.

## **Troubleshooting**

Problem	Possible cause	Possible solution	Reference page
No sound/video is	Improper connection.	Connect all cords properly.	11-15
produced.	Headphones are connected.	Disconnect the headphone plug.	8
The clock display is flashing.	A power failure occured or the power plug was disconnected.	Reset the clock.	16
Diagraphy back dang and	The disc is upside down.	Place the disc on the disc tray with the letter-printed surface facing up.	21
Disc playback does not start.	Moisture has condensed on the lens.	Leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.	3
A certain point cannot be played back properly.	The disc is scratched or dirty.	Clean or replace the disc.	52
The volume of cassette tape playback is low.	The head or capstans are dirty.	Clean the head or capstans.	52
You cannot record a cassette tape.	The cassette tape is write-protected.	Cancel the write-protection.	44
A radio broadcast cannot be received.	No antenna is connected.	Connect an antenna.	11, 12
A whirring noise is produced.	The main unit is located close to a TV, computer, or other electric appliance.	Place the main unit away from a TV, computer, or other electric appliance.	3
You cannot set the timer.	You did not set the clock.	Set the clock.	16
The timer does not work.	The main unit is turned on.	After setting the timer, turn off the main unit.	47, 49
You cannot operate the remote control.	The remote control batteries are running low.	Replace the batteries with new batteries.	9
You cannot operate the main unit with the number buttons on the remote control.	The remote control mode selector on the remote control is set to TV.	Set the remote control mode selector to AUDIO.	16
When you turn on the main unit, a noise comes out from the rear of the main unit.	The internal cooling fan produces the noise as it rotates.	The noise is not a malfunction. This is to prevent excessive heat.	13, 17

#### If this product does not function properly even after you have implemented the possible solutions given above

Many functions of this product are implemented by microcomputers. If malfunction is caused by thunder or static electricity, or the main unit does not function properly even when you press a button, disconnect the power plug from the AC outlet, wait for a while, and then connect this product again. Then reset the clock.

## **Specifications**

#### ■DVD receiver (CA-UXQD9S)

#### **Amplifier**

Output power 20 W + 20 W at 4  $\Omega$ 

(10% THD)

Input terminals

<Analog> AUX×1,

500 mV/47 kΩ:LEVEL1

250 mV/47 kΩ:LEVEL2

Output terminals

<Analog> Speaker×1, 20 W/4  $\Omega$ 

Impedance 4  $\Omega$  - 16  $\Omega$ 

Headphone (×1), 25 mW/32  $\Omega$ 

Impedance 16  $\Omega$  - 1 k $\Omega$ 

<Digital> DVD/CD optical input × 1

-23 dBm to -15 dBm (Optical square terminal)

<Other> AV COMPU LINK × 2 (\( \phi \) 3.5)

Tuner

Frequency FM:87.50 MHz - 108.00 MHz

AM:531 kHz - 1 710 kHz (9 kHz spacing) 530 kHz - 1 710 kHz

(10 kHz spacing)

DVD player

Playable discs DVD VIDEO, DVD AUDIO,

CD, VCD, SVCD, CD-R/CD-RW (CD, VCD, SVCD, MP3/WMA/JPEG format), DVD-R/DVD-RW (video format)

#### Cassette deck

Frequency response

Normal (type I) 60 Hz - 14 000 Hz Wow and flutter 0.15% (WRMS)

#### General

Power requirement AC 240 V $\sim$ , 50/60 Hz

Power consumption 70 W (at operation)

1.3 W (on standby)

Dimensions 165 mm (W) × 200 mm (H)

× 355 mm (D)

Mass (approx.) 4.6 kg

### ■Speaker (SP-UXQD9S)

System 3-way bass reflex type,

Magnetically shielded type

Speakers Woofer: 10 cm × 1

Midrange: 4 cm × 1 Tweeter: 1.5 cm × 1

Powerhandling 20 W

capacity

Impedance  $4 \Omega$ 

Frequency range 55 Hz - 40 kHz

Sound pressure 85 dB/W•m

level

Dimensions 140 mm (W) × 231 mm (H)

× 204.5 mm (D)

Mass (approx.) 2.2 kg (1 unit)

### Micro component system (UX-QD9S)

#### General

Dimensions 445 mm (W)  $\times$  231 mm (H)

× 355 mm (D) Mass (approx.) 9.0 kg

• U.S. and foreign patents licensed from Dolby Laboratories.

